Master Tracks™ and Master Tracks Pro™

Users' Manual

PASSPORT®

for Commodore

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Introduction

Welcome to Passport's integrated professional composing, recording and editing software for MIDI instruments - **Master Tracks™** for the Commodore 64 and **Master Tracks Pro™** for the Commodore 128.

IMPORTANT!
This manual contains step by step instructions for both programs as most functions and features are similar. Any differences are outlined with this symbol - ≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈≈.
Please read and follow the appropriate instructions for the program you have purchased

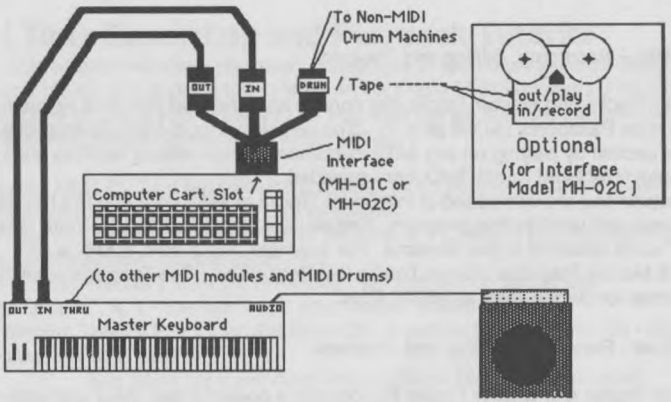
Hardware Requirements for :
Master Tracks™ (Commodore 64 program) and Master Tracks Pro™ (Commodore 128 program)

1. Computer:
   a) A Commodore 64 (or 128 in the "64" mode)computer for Master Tracks.
   b) A Commodore 128 for Master Tracks Pro.
2. A Commodore 1541 / 1571 disk drive.
3. Video monitor or television (color preferred).
4. Game-style joystick for Quikstep Editor .
5. One **Passport MIDI Interface** ™ for the Commodore 64/128 (MH-01C) , and at least two 5-pin DIN cables. To take advantage of the programs' Tape Sync features, you must use the **Passport MIDI Interface with Tape Sync** ™ (MH-02C with a DCK-3 or similar tape sync cable) for the C64/128. We cannot guarantee that Master Tracks will work properly with "Imitation Copies" of the Passport MIDI Interface.

Please Note: The MIDI Interface cartridge must be installed in the expansion port of the C64/128 to insure the proper working of this program. Consult the diagram on the next page and your Interface users' manual for a more detailed explanation of card installation and correct cable hook-up.

6. One or more MIDI equipped synthesizer(s).
7. Amplifier, headphones, or other audio monitoring system.
8. Optional: MIDI Drum machine. Non-MIDI drum machines with independent external start/stop and clock inputs can be used with the addition of Passport's drum sync cable (DCK-1 or DCK-3). Please refer to your Interface manual for specific information about non-MIDI drum machines.

Basic Setup Diagram :



How to load Master Tracks:

1. Before turning the computer **ON**, turn the disk drive **ON**, then place your Master Tracks program disk in the disk drive and close the door of the drive.
2. **Now** turn your computer **ON.**
3. Type **LOAD "*",8,1** then hit **RETURN.** Master Tracks will then load and run.

PLEASE NOTE :
If you do not have a Commodore 1541 or 1571 disk drive you may experience problems with loading the portion of this program that speeds up disk operation. To bypass this feature type **LOAD "2",8,1** then **RETURN** to load and run Master Tracks.

4. Turn all of the instruments connected to your MIDI Interface **ON.**

How to load Master Tracks Pro:

1. Turn the disk drive **ON** (Before turning the computer on), then place your Master Tracks Pro program disk in the disk drive and close the door of the drive.
2. **Now** turn your computer **ON** - the program will automatically load and run.
3. Turn all of the instruments connected to your MIDI Interface **ON.**
4. Make sure the shift lock is **OFF.**

PLEASE NOTE :
If you do not have a Commodore 1541 or 1571 disk drive you may experience problems with loading the portion of this program that speeds up disk operation - please use the alternate method listed below to load and run Master Tracks Pro.

1. Turn the computer **ON** (make sure the drive is OFF) then place your Master Tracks Pro program disk in the disk drive and close the door of the drive.
2. Now turn the disk drive **ON.**
3. Type **BOOT "2"** then hit the **RETURN** key to load and run Master Tracks Pro.

Master Tracks and Master Tracks Pro are integrated music productivity tools for composing, recording and playing back high quality music via MIDI.

1) Real Time - Recording, Editing and Playback

Master Tracks and Master Tracks Pro contain an enhanced real time recording system based on Passport's MIDI/8 plus ™. You record live multi-track **Sequences** in the real time section by playing on any MIDI instrument. Track editing facilities such as Mix, Link, Autocorrect and Punch In/Out are provided.

Sequences are composed of individual Tracks of MIDI data and are the basic musical storage unit used by this program. **Sequences** are stored on your data disks with a ".M8" suffix attached to the filename. For example "SEQUENCE.M8" is an example of a Master Tracks or Master Tracks Pro **Sequence**. This Program uses the same file format for **Sequences** as MIDI/8 Plus.

2) Step Time - Recording, Editing and Playback

Master Tracks and Master Tracks Pro contain a powerful step input and editing system called Quikstep™. Quikstep lets you build **Step Files** by inputting information from any MIDI keyboard in step time. Complete visual editing facilities are provided for **Step Files** using a joystick and your computer keyboard.

You record **Step Files** in the Quikstep section. **Step Files** can be played back in Quikstep or converted to Tracks for playback in the real time section or song mode. Conversely, live Tracks can be converted to **Step Files** for visual step editing. **Step Files** are stored on your data disks with a "QK." suffix attached to the filename. For example "STEPS.QK" is an example of a Quikstep **Step File**.

3) Song Mode - Composing, Editing and Playback.

Master Tracks and Master tracks Pro contain a versatile Song Mode for composing and editing songs like you would with a drum machine. Individual **Sequences** can be joined together to form complex **Song Files**. The Song Mode is one of the most powerful compositional features of Master Tracks.

You create and playback **Song Files** in the Song Mode section. **Song Files** are composed of different **Sequences** linked together. **Song Files** are stored on your data disks with a ".SM" suffix attached to the filename. For example "SONG.SM" is an example of a Master Tracks **Song File**.

You might begin a typical session by laying down some basic rhythm parts for your intro, verse and chorus with Quikstep. These Step Files can then be converted to Tracks. You might then overdub a live bass line and accompaniment in the real time section, as well as a solo line. Any Track can be converted to a Step File for step editing and variation and then be reconverted back to a track. You would store Sequences on disk for your intro, verses and chorus. You can then assemble the various Sequences into a Song File in the Song Mode and experiment with different arrangements. Finally, you can play back your Song File in the Song Mode and even synchronize it to tape for final recording.

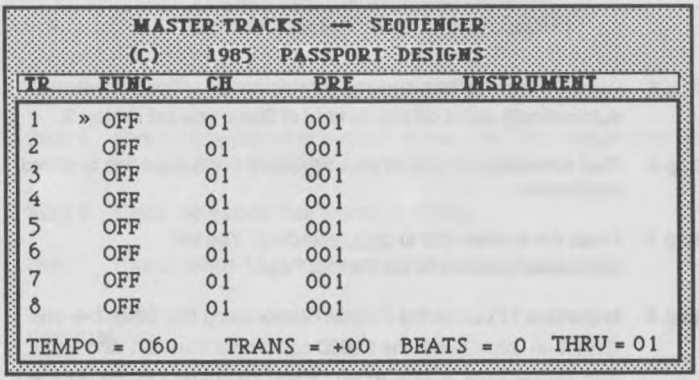
Main Sequencer

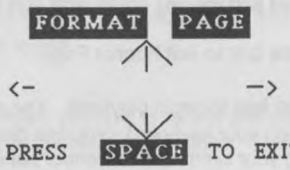
Real Time Recording and Playback Tutorial

This section will show you step by step how to record in real time using this program.This section is designed to work with a single MIDI keyboard. You may, of course, have as many sound sources as you wish but we suggest that you get familliar with the basics before connecting a larger set up.

1. Connect MIDI OUT on your Interface to MIDI IN on your keyboard. Connect MIDI IN on your Interface to MIDI OUT on your keyboard.
2. Set your keyboard to receive on MIDI Channel # 1 (Consult your keyboard owners manual if you have trouble doing this).
3. **For Master Tracks :** Turn the drive ON, then turn the computer On.
   Type Load "*", 8, 1 - this will "boot" your Master Tracks disk.
   For Master Tracks Pro : Turn the drive ON, then turn the computer On - the program will self "boot".
   See page 1/2 if you have any problems booting the program.

After loading the program will display the Format Page:


MASTER TRACKS — SEQUENCER
(C) 1985 PASSPORT DESIGNS
TR FUNC CH PRE INSTRUMENT
1 » OFF 01 001
2 OFF 01 001
3 OFF 01 001
4 OFF 01 001
5 OFF 01 001
6 OFF 01 001
7 OFF 01 001
8 OFF 01 001
TEMPO = 060 TRANS = +00 BEATS = 0 THRU = 01



PLEASE NOTE (for Master Tracks Pro):
The program "Pages" (screens) depicted in this manual are for the Master Tracks version of the program. Master Tracks Pro has the addition of the "Utilities" page commands listed on the Format page - LOOP, CLOCK, AFT and DRUM. Please see the Utilities section (2/21) of this manual for information on these features.

Recording a track

Step 1 The **Format Cursor** » will be pointing at track #1.

Step 2 Press R to switch track into **REC** (record).

Step 3 Move the **Format Cursor** using the CRSR -» key to **BEATS** and type in a number (1 thru 9), to give yourself a metronome count and set the clock timing for the recording (i.e. 4 for 4/4 time 3 for 3/4 time etc. Default setting is 4/4 time).

Step 4 Press the space bar to exit the Format Page. You will see the Main Page menu displayed below the Track Display.

USED: 00016 CLOCK: 001.1.00
LEFT: 36591

DISK / **E**DIT / **F**ORMAT
UTILITIES / **Q**UIKSTEP / **S**ONG
PRESS **SPACE BAR** TO RECORD OR PLAY

Step 5 Press the space bar again to start recording. The program will automatically count off the number of Beats you set in step 3.

Step 6 Play something simple on your keyboard like a bass line or chord progression.

Step 7 Press the space bar to stop recording. You will automatically return to the Format Page.

Step 8 **Important !** Position the Format Cursor using the CRSR -» and CRSR «- keys under the **FUNC** column for track # 1 and press P to set the track in **PLA** (play) - if you do not do this the track will remain in Record and you will erase what you have just played.

Step 9 Press the space bar to exit Format Page.

Step 10 Press the space bar to begin playback. You should hear your track playback on your keyboard. You can change the sound on your keyboard using your synthesizer's control panel.

Step 11 You can stop and restart playback by pressing the space key once to stop and twice again to start. When ready to move on, stop playback and return to the Format Page.

Recording a second track

Step 1 From the Format Page press the up and down CRSR keys to switch the format cursor to point at track # 2. Use the CRSR -> and CRSR <- keys to position the cursor under the **FUNC** column on track # 2.

Step 2 Press R to switch track # 2 to **REC** (record). The previous track will automatically switch to **PLA** (play).

Step 3 Press the space bar to exit the Format Page.

USED: 00016 CLOCK: 001.1.00
LEFT: 36591

DISK / **E**DIT / **F**ORMAT
UTILITIES / **Q**UIKSTEP / **S**ONG
PRESS **SPACE** BAR TO RECORD OR PLAY

Step 4 Press the space bar to begin recording.

Step 5 Play your keyboard to overdub a new part. You should hear your first part play back while you are recording the second part.

Step 6 Press the space bar to end recording.

Step 7 Repeat steps 1 - 6 to record another track if you wish.

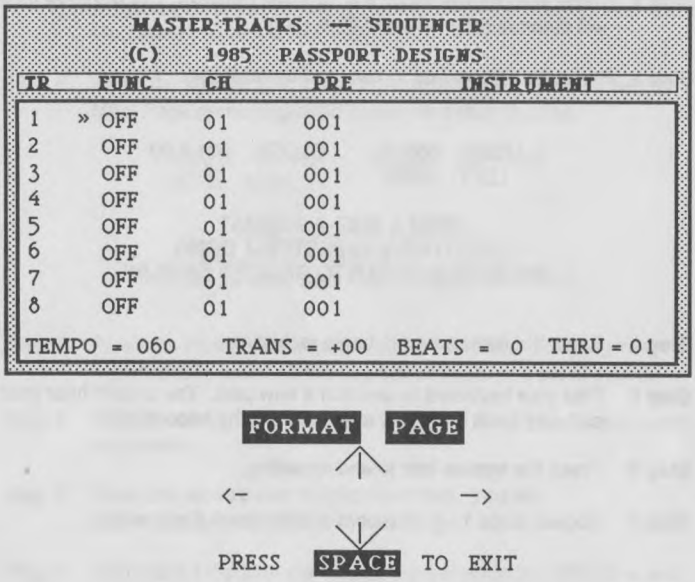
Optional

Step 8 You can change the tempo during playback by pressing the CRSR -> key to increase playback speed and CRSR <- to decrease playback speed.

This tutorial has shown you how to record and playback tracks in real time. The following pages will explain the real time section in detail and show you how to use this program.

The Format Page

The first Page you will see upon entering Master Tracks is the **Format Page**. This is where you will set up the track controls for recording and playing back multi-track sequences. You get to the **Format Page** from the **Main Page** by pressing F .


MASTER TRACKS — SEQUENCER
(C) 1985 PASSPORT DESIGNS
TR FUNC CH PRE INSTRUMENT
1 » OFF 01 001
2 OFF 01 001
3 OFF 01 001
4 OFF 01 001
5 OFF 01 001
6 OFF 01 001
7 OFF 01 001
8 OFF 01 001
TEMPO = 060 TRANS = +00 BEATS = 0 THRU = 01
FORMAT PAGE
<-
->
PRESS SPACE TO EXIT

The upper portion of this Page is called the **track display**. This is where you will find the current status of your tracks.

The lower portion of the Page will always inform you of what you are doing and which command keys are currently valid. We will refer to this portion as the **command display**.

PLEASE NOTE (for Master Tracks Pro):
The program "Pages" (screens) depicted in this manual are for the Master Tracks version of the program. Master Tracks Pro has the addition of the "Utilities" page commands listed on the Format page - LOOP, CLOCK, AFT and DRUM. Please see the Utilities section (2/21) of this manual for information on these features.

The Format Cursor

Looking at the **track display**, you will find a flashing **>**. When this **format cursor** points to an item, that item is changeable. Moving this cursor around the **Format Page** is done by using :

CRSR -> (Or the "F1" key,) to move the format cursor to the right, through **FUNC, CH, PRE, INSTRUMENT,** at the top of the Page, then to **TEMPO, TRANS** and **BEATS.**

CRSR <- (Or the "F3" key,) to move the format cursor to the left.

The **Up** and **Down CRSR** keys, (Or the "F5" and "F7" keys,) to select the track you are working on. (TEMPO, TRANS, BEATS and THRU are common to all tracks.)

This **format cursor** "wraps around", meaning that if you keep pressing the **right arrow** key until you pass **THRU**, the cursor will pop up again at **FUNC**. The **Down CRSR** key will likewise bring you from track #8 to track #1.

FUNC (Function)

When the **format cursor** points to the **FUNC** column, you may choose to have the track it points to either **REC** (record), **PLA** (play), or turn **OFF.** Press **R** for **REC**, **P** for **PLA** or **O** for **OFF**. Only one track at a time may be in **REC.**

CH (MIDI Channel Assignment)

When the **format cursor** points to the **CH** column, you may choose the **MIDI channel** for that track. You choose the MIDI channel by typing a number from **1** to **16**, or by selecting a **00** for "no channel".

Channel assignment is mainly a concern when you are controlling several MIDI-equipped instruments, which support the OMNI OFF MIDI mode (or if you have one instrument that can receive multiple MIDI channels like the Casio CZ-101). If you have only a single-channelled instrument, or if your instruments function in OMNI mode only, leave all channels set to 01.

If you have multiple instruments it is useful to set them to receive consecutive MIDI channels and leave them set that way. This way you will always know for example, that your DX-7 is channel 1 and that your Expander Module is channel 2, etc.

See notes : Advanced Techniques 6/6 "Recording with a multi-track tape recorder" Step 1

The **CH** value acts as a kind of a channel "Mask" for recording and playing back MIDI data. Master Tracks assigns a MIDI channel to MIDI data when it is **recorded**. This channel value is that data's **permanent MIDI channel**. Master Tracks also lets you reassign a MIDI channel during **playback**. This channel value is that data's **playback channel**.

Permanent channel assignment

When data is initially recorded it is assigned a MIDI channel depending on the value set in the **CH** column. If the setting is channel 01 thru 16, the data is stored with that channel number in memory when it is recorded. That channel will remain a permanent part of that MIDI data's information.

If the **CH** setting is 00, then no MIDI channel will be assigned to the data during recording. The MIDI data will be recorded "literally" on whatever channel (or channels) is being sent from the MIDI instrument.

Mixing two tracks containing MIDI data on two different channels into a single track, will create a **multi-channel track**. With Master Tracks it is possible to have data on all 16 MIDI channels mixed into a single track. (see Edit Page in Real-Time section).

Converting a track to a step file and back (see Quikstep Converter) allows you to modify a track's permanent channel assignment if you wish.

Playback channel assignment

During playback you may override a track's permanent channel(s). Simply move the format cursor to point at the track whose channel you wish to change and type a new channel number 1 - 16. The **CH** setting has no effect on a track's permanent channel assignment during playback. You may experiment with any **CH** setting during playback without permanently affecting the MIDI data.

A **CH** setting of 00 will playback the MIDI data on whatever permanent channel (or channels) that the data is stored with. When the **CH** setting is 00 , the MIDI data will playback on whatever permanent channel(s) it was recorded on.

A **CH** setting of 00 will be automatically set whenever you mix two tracks together into a single track. This way, multi-channel MIDI data can playback on a single track.

Please note: In order to hear a channel assigned track playback you must set the **receive channel number** on your synthesizer(s) to match the specific track's **output channel number**. Consult the owner's manual of your synthesizer for instructions on setting the instrument's **receive channel** and **receive channel mode**.

PRE (Preset)

This column serves as a remote control for automatically setting the **preset** (program number) on your synthesizer at the beginning of a track. When a track is set to **PLA** the synthesizer will automatically switch to the selected **preset** number on playback. The preset numbers can be selected either from your **synthesizer's control panel**, or by typing the **number** on your computer keyboard. Valid preset numbers are 01 thru 128. A setting of 0 will make the sequencer not send any preset change command for that track. If you enter an invalid number Master Tracks will not let you move on until the entry is corrected.

Other things to be aware of when changing presets:

* Entering preset number 128 does not mean that you have 128 preset sounds in your synthesizer. Make sure that the preset number you type in matches one that actually exists in your synthesizer.

* If two or more tracks are set to the same MIDI **channel**, then the preset with the lowest numbered track has priority.

* Remember, this is only the **starting** preset for the track. If you make a preset change on your master instrument while recording, the **preset change** will also be recorded with the notes you play. Your instrument will automatically make all preset changes every time you play the track back, even if you change the starting preset.

* Some instruments use unusual codes to indicate presets (i.e. a letter for memory bank or a "base 8" numbering system), in these cases the preset number on the page may differ from the display on your instrument's control panel. Don't panic, it will still work correctly.

* Some instruments have an external program select or **preset protect** function which must be **manually switched** on or off before it can accept preset commands from Master Tracks. Consult your instrument's owners manual for details.

INSTRUMENT (MEMO)

This column provides you with a place to make comments about each track. In a multiple keyboard arrangement it can get confusing as to which channel controls which **instrument.** Notating which instrument (i.e. DX7, CZ, Korg, etc.) or which sound (i.e. horn, violin, flute, etc.) is controlled by the track will make it easier to remember what is going on with your setup. Just type the name (limited to 12 characters) and press Return. To change any name simply type over the old name and press Return once again.

Please note: This is only a means of **labelling** a track; it does not affect the **channel setting;** you must set that in the **CH** column.

COMMON TRACK FUNCTIONS

Below the track specific functions you will find four settings that affect all tracks.

TEMPO

This represents both the tempo for **record** and **playback speed**, as well as the **metronome** (click track) you will hear when recording. The number represents beats-per-minute and has a valid range from 25 to 200. (20 to 250 for **Master Tracks Pro**). Type in a number and use the arrow keys to move on. If you type in any number outside the "legal range" the program will not let you move on until it is corrected.

During **playback** you may use the CRSR -> and CRSR <- keys to increase or decrease the tempo. You may also change the tempo in a sequence by entering a tempo change command via Quikstep (see section 3). This tempo change is automatically displayed as the sequence plays back.

Please note: Tempo only is active if your **Master clock** is set to Internal .

TRNS (Transposition)

After a sequence has been recorded you may use this feature to **transpose** it to a different key. This makes it possible for you to record a sequence in a key which is comfortable to play in, then play it back in the key in which you wish to hear it in.

You can transpose any sequence up or down 24 half steps (two octaves). To **transpose** a sequence type either + (for up) or - (for down) followed by the number of half steps you wish to transpose by (1 thru 24). Numbers entered without a + or - will be assumed to be a "+" and will be transposed up.

You can transpose individual tracks up and down when converting to and from Quikstep or by using the technique described in the Advanced section of this manual.

BEATS (Beats Per Measure)

For Master Tracks: Beats are used to set the **clock** readout correctly, and also to set the **metronome** to "count off" a measure before recording begins. To set beats per measure, point to **BEATS** with the format cursor then type 4 for 4/4 time, 3 for 3/4 time, etc. Valid settings here are 0 thru 9; if set to 0 the metronome is **off** and the measure counter defaults to a two beat measure.

For Master Tracks Pro: Beats are used to set the **clock** readout correctly, and also to set the **metronome** to "count off" a measure before recording begins. To set beats per measure, point to **BEATS** with the format cursor then type 4 for 4/4 time, 3 for 3/4 time, etc. Valid settings here are 2 thru 9. To toggle the metronome clicks **on/off** , point to BEATS and press Return .

NOTE: Notes or chords held down during the count-in beats will be recorded as if you played them on the first beat (downbeat) . This feature lets you set-up a chord or note for precise recording on the downbeat.

THRU (MIDI Thru)

This feature allows you to echo (pass) any MIDI information received by your Passport MIDI Interface through your interface's **MIDI OUT**. In other words you can control an instrument connected to the **MIDI OUT** of your Interface, from an instrument connected to the **MIDI IN,** as if there was a direct connection between them. This is particularly useful when using several slave sound modules from a controller keyboard. MIDI THRU has no effect on a track's permanent MIDI channel during recording.

To assign a specific channel to "echo", point to **THRU** with the **format cursor** and type a number (1 to 16).

Selecting a **THRU** channel of 00 will turn MIDI **THRU Off**.

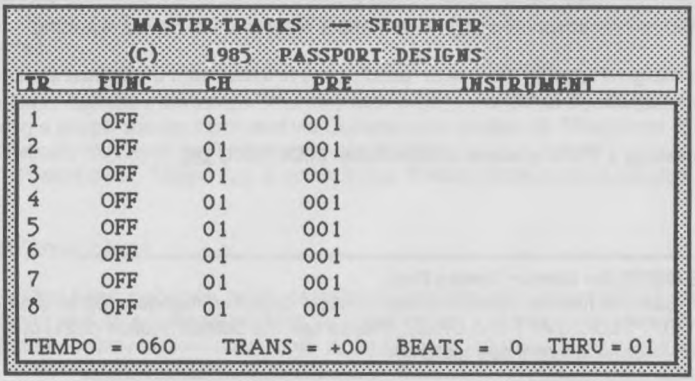
PLEASE NOTE (for Master Tracks Pro):
Master Tracks Pro has the addition of the "Utilities" page commands listed on the Format page - LOOP, CLOCK, AFT and DRUM. Please see the Utilities section (2/21) of this manual for information on these features.

Exiting the Format Page

When you are satisfied with all the changes you have made, press the space bar to move on to the Main Page. If you accidently press the space bar before you are ready to leave the Format Page, press F to return to the Format Page.

The Main Page

When you exit the Format Page you will find yourself on the **Main Page**. The Main Page is where you actually record and playback multi-track sequences. Note that the track display portion is still present; however the format cursor has disappeared. You have no control over format parameters while in the Main Page. The command display has now been replaced by the Main Page menu:


MASTER TRACKS — SEQUENCER
(C) 1985 PASSPORT DESIGNS
TR FUNC CH PRE INSTRUMENT
1 OFF 01 001
2 OFF 01 001
3 OFF 01 001
4 OFF 01 001
5 OFF 01 001
6 OFF 01 001
7 OFF 01 001
8 OFF 01 001
TEMPO = 060 TRANS = +00 BEATS = 0 THRU = 01

USED: 00016 CLOCK: 001.1.00
LEFT: 36591

DISK / EDIT / FORMAT
UTILITIES / QUIKSTEP / SONG
PRESS **SPACE** TO RUN

USED / LEFT (MEMORY)

The numbers which follow **USED** and **LEFT** display how much memory (in bytes) you are using in your sequence and how much is left. While recording, these numbers will change every time you enter an **event** (note on, note off, preset change, pitch bend, modulation, etc.). Be aware that some types of events consume more memory then others (i.e. aftertouch, pitch bend - see Utilities Page).

CLOCK

The clock lets you know where you are in your sequence. The numbers in the clock stand for:

	nnn (Measure number)	**.**	**n** (Beat)	**.**	**nn** (MIDI Clocks)
Master Tracks:	001-999		1-9		00-23
Master Tracks Pro:	0001-9999		1-9		00-23

MAIN PAGE PLAYBACK COMMANDS :

START / STOP (Record and Playback)

Pressing the space bar from the Main Page will **start** record and playback. When the sequencer is running pressing the space bar will **stop** record and playback and return you to the Format Page.

Master Tracks Pro: Sequence recording or playback can be set to start at any point. A new starting point is set by pressing CTRL S when in the paused mode (see below) , and can be reset to the beginning by pressing CTRL S when stopped.

TEMPO CHANGE

Use the CRSR -> and CRSR <- keys to increase or decrease the tempo during playback.

MUTE

Pressing keys 1 thru 8 will mute, or un-mute the corresponding track during playback. Press 0 to un-mute all tracks.

SOLO

Pressing Shift and keys 1 thru 8 will let you hear the corresponding track in solo, all other tracks will be muted. Press the 0 key to un-solo.

PAUSE

While the sequencer is in playback mode and running, you may **pause** at any time by pressing RUN / STOP. You can move forward / backward in the piece or Punch In (Record) while the sequencer is paused with the following five commands:

F **Fast forward.*** Pressing the F key when paused will cause the sequencer to fast forward. Press any other key to return to **pause.**

R **Rewind.*** Pressing the R key when paused will cause the sequencer to fast reverse. Pressing any other key will return the sequencer to **pause.**

CRSR ->**Single step forward.*** Pressing the -> key will move the sequencer ahead 1 clock. You will hear the piece playback when single stepping forward. There are 24 clocks, numbered 00 to 23, in a beat. This is not affected by the number of beats in a measure or the value of the beat note. 24 clocks per quarter note is MIDI standard time.

CRSR <- **Single step rewind.*** Pressing the <- key will move the sequencer back 1 clock. You will not hear playback when rewinding.

RUN / STOP - Resume playback from point indicated by the clock.

Space - Stop Playback and return to Format Page.

Return - Punch In at point indicated by the clock. (Proper track must be previously selected - see the following instructions and the Utilities section.)

* Please Note: Non-MIDI drum machines will not stay in sync with your sequence when these Pause features are used.

MAIN PAGE RECORDING COMMANDS:

Real Time Recording

Use the CRSR keys to choose a track and then press R to set that track to Record. Pressing the space bar will then start the recording of the chosen track while playing the other tracks (if any).

PUNCH IN / PUNCH OUT

NOTE: Master Tracks and Master Tracks Pro differ in their operation of selecting the track number you wish the Punch In to take place on . Please use the proper method for selecting a track before attempting a Punch in.

~~~~~~

Track Selection For Master Tracks:

Punch in track selection is done by first calling up the Utilities Page (feature #3) and selecting the track number you wish the Punch In to take place on (See Utilities Page). When you Punch In, the program will switch the pre-selected track to **Record**, and a "*" will apear next to the affected track for your convenience.

Track Selection For Master Tracks Pro:

The Punch in track is selected on the Format Page. Use the cursor keys to choose a track then press the Return key to set it for Punch in. You will see a √ by the selected track. When you Punch In, the program will switch the pre-selected track to **Record**, and a "*" will apear next to the affected track for your convenience.

~~~~~~

Real Time Punch In and Out

You may Punch In to record mode to correct playing errors on any track in real time. After selecting the track to Punch In on, begin playback on the Main Page by pressing space. When your sequence is playing back, simply press the Return key to Punch-In.

When you Punch In, the program will switch the pre-selected track to **record**. When you have completed the Punch In press Return again to Punch Out.

Punching In and Out of a track will erase the previously recorded section and replace it with whatever you played after Punching In. You can **"Trim"** a track and cause it to end by Punching In to a track and pressing Space instead of Return to Punch Out. This will cause the track to end at the nearest full beat after you press the space bar. This is useful for "undoing" a link or for shortening a track for any reason.

PLEASE NOTE :

You can only Punch in **once** per take. To Punch In again you must reset the Punch In track.

Main page Record Commands cont.

Pause Mode Punch In and Out

You may Punch In to **Record** mode while the sequence is paused. This is useful because you can use the arrow keys or fast foward / rewind to move to the desired punch in spot for making fast and precise editing changes to a real time track .

After selecting the track to Punch In on, begin playback on the Main Page by pressing space. When your sequence is playing back, press RUN / STOP to **PAUSE** playback.

You can now enter the Record mode by pressing return . The sequence will remain paused but in the Record mode. Pressing any other key (except the space bar or return) will then resume normal playback tempo - **in the record mode.**

Pressing return will stop Punch In and continue playback ; pressing the space key will stop all playback and erase the remainder of the Punch In track.

PLEASE NOTE : You can only Punch In **once** per take. To Punch In again you must reset the Punch In track.

Single Step Recording (from the Main Sequencer Pause Mode)

After pausing playback by pressing RUN / STOP , you can enter the Punch In mode and record a single note or chord at a time by pressing return then advancing the **clock** forward by pressing the CRSR -> key for each MIDI clock you wish to record.

For example: If you wish to Punch In a single chord you would press return from the paused mode, hold down the keys on your MIDI keyboard for the chord you wish to play, advance the clock by pressing CRSR -> each time for the number of MIDI clocks you wish the chord to be on, and then release the keys on your MIDI keyboard. You must then advance the clock for the number of clocks you wish a **rest** to play following the chord. Punching Out is accomplished by pressing return. You can also "Trim" a track (erase the end) in Step Time Punch In by pressing the space key after Punching In.

PLEASE NOTE : You can only Punch In **once** per take. To Punch In again you must reset the Punch In track.

The Disk Page

You enter the **Disk Page** from the Main Page by pressing D. All disk access functions for **Sequences** are performed from the menu on this Disk Page. This Disk Page lets you load and save sequence files with a ".M8" suffix. You do not have to type the ".M8" suffix. (Disk access to Quikstep files and Song files must take place from the Disk page of their respective sections.) This program will allow you to work with filenames up to 13 characters long (not including prefixes or suffixes).

DISK PAGE

C	CATALOG DISK
L	LOAD FILE
S	SAVE FILE
D	DELETE FILE
R	READ MIDI/4
W	WRITE MIDI/4
F	FORMAT A DISK

PRESS SPACE TO EXIT

Catalog

Press C to view a catalog (listing) of the files stored on the chosen data disk. Sequence names will be listed by their name followed by their file type **".M8"** (i.e. MINUETTO . M8). The catalog listing can be paused by pressing SPACE, press any key to continue the listing. Press any key on the computer to return you to the Disk Page.

Loading a Sequence File

To load a sequence from your data disk; first press L to **load** a data file, then type in the file's name and press Return. MIDI/8 Plus files may be loaded directly into Master Tracks. You do not have to type the ".M8" suffix.

Saving a Sequence File

To save a sequence to your data disk, press S. You will be asked for the name of the file (sequence) to be **saved.** Type in the name of your sequence at this time and press Return. You do not have to type the ".M8" suffix.

Deleting a Sequence File

If you decide that you no longer wish to have a sequence stored on your data disk, you may **delete** it. Press D and you will be asked to name the file. Type in the file's name and press Return. Just as a precaution your computer will now ask you "Sure?", enter Y to delete your file, or N to come to its rescue.
Remember: If you delete a file you cannot retrieve it!

Reading a MIDI/4 or 4 Plus File

Master Tracks and Master Tracks Pro lets you use existing MIDI/4 or MIDI/4 Plus files by automatically converting them. To read a MIDI/4 file from a data disk; first press R to **read** a MIDI/4 file, then type in the file's name and press Return. As with regular sequences, you do not have to type the ".M4" suffix on the MIDI/4 filename.

Writing a MIDI/4 Plus File

You can save tracks 1-4 in a sequence as a MIDI/4 Plus file. This would be useful for saving files for use with Passport's MIDI/Player. To write a MIDI/4 Plus file to a data disk, press W. You will be asked for the name of the MIDI/4 file to be **written.** Type in the name of the MIDI/4 Plus file at this time and press Return. You do not have to type the ".M4" suffix.

WORKING WITH PROGRAM DISKS:

For Master Tracks:
In order to move between the three Master Tracks modules, you will need to keep the Master Tracks "program" disk in the drive most of the time. (If it is not in the drive when needed, you will be prompted to "Insert Master Tracks.") When you need to load or save a sequence, step, or song file or a "work" file from Quikstep or the Song Mode you should remove your program disk and insert a "data" disk in the drive. (See next page.)

For Master Tracks Pro:
Since the entire program resides in memory, there is no need to keep the program disk in the drive after boot up. After booting, you can keep a data disk in the drive to save your files.

Warning! Do not format or erase your program disk!

WORKING WITH DATA DISKS

Data disks are used to store your sequences, song files, Quikstep setup and step files. We recommend that you save your work to disk as often as possible while you are recording or editing and make a backup copy of any file you wish to keep.

Before beginning work with Master Tracks or Master Tracks Pro we would advise formating at least one blank data diskette. (See below.)

Formatting Data Disks

To Format a Disk, place a blank diskette (or one you wish to erase) into the disk drive. You will be given several chances to back out. If you wish to continue, give a name for the disk and a two character I.D. at the prompts. Note: Try to think of two unique characters for each disk that you format; the Commodore disk system uses this to tell when a different disk has been inserted into the drive. Any two characters will do, but you must enter two.

WARNING - Formatting a diskette will **ERASE** the disk. Use only blank disks or disks that have data you do not want to keep. Exercise caution when Initializing data disks - **Do not format your Master Tracks or Master Tracks Pro program disk !**

Exiting the Disk Page

When you have finished all of your disk operations, press the space bar to return to the Main Page. If you accidently press the space bar before you are ready to leave the Disk Page press D to return to the Disk Page.

The Edit Page

The **Edit Page** can be reached from the Main Page by pressing E. Once you have recorded your sequence, the Edit Page will provide you with several options to modifiy or manipulate it on a track by track basis.

EDIT PAGE

A AUTOCORRECT TRACK
E ERASE TRACK
L LINK TRACK
M MIX TRACKS

PRESS SPACE TO EXIT

Autocorrecting a track

Autocorrect is a feature which adjusts recorded events such as keypresses and other MIDI data to a given rhythmic precision. Autocorrect adjusts the timing of MIDI events to a given division of a beat, aligning the events to the nearest beat division.

To Autocorrect: Press A when on the Edit Page. You will be prompted:

AUTOCORRECT TRACK # (1-8) :

TYPE CTRL-A FOR ALL
PRESS SPACE TO EXIT

If you wish to Autocorrect just one track, enter its number (1 thru 8). If you want all tracks to be autocorrected to the same amount, hold down the CONTROL key and press A .

After you make your selection you will be prompted:

AUTOCORRECT TRACK # 1

1. QUARTER (1)
2. EIGHTH (2)
3. 8TH. TRIPLET (3)
4. SIXTEENTH (4)
5. 16TH. TRIPLET (6)
6. THIRTY-SECOND (8)
7. 32ND. TRIPLET (12)

Enter the number displayed on the left side of the autocorrect resolution you wish. For example, if you want the timing of all MIDI events in the track to be rounded to the nearest eighth note, you would enter 2 for eight notes. Answer the prompt Y to autocorrect the track.

In MIDI, the standard 24 clock beat is presumed to be a quarter note. The numbers in the right hand column indicates the relationship of the resolution to the "standard beat" (there is 1 quarter note in a beat, or 12 thirty-second note triplets). If you are working in a non-quarter note time you will need to choose autocorrect resolution by clocks rather than name (i.e. with an eighth note beat, resolution setting #2 is actually sixteenth note resolution).

Autocorrect for Master Tracks:
Remember: Autocorrect is for fine-tuning acceptable tracks. It can not salvage a really sloppy track. However, notes with durations shorter than one half of the selected autocorrect value will be eliminated from the file. Start with short duration values and listen to the track playback. Correcting to triplet values will round off and shift all timing to the nearest triplet value, so use this only when your entire track is composed of triplets.

Autocorrect for Master Tracks Pro:
Remember: Autocorrect is for fine-tuning acceptable tracks. It can not salvage a really sloppy track. Start with short duration values and listen to the track playback. Correcting to triplet values will round off and shift all timing to the nearest triplet value, so use this only when your entire track is composed of triplets. Only the note Start time is affected - pitch bend and other non-note data along with original note durations are kept intact when correcting.

Remember also that an autocorrected track cannot be un-corrected. We recommend saving your sequence to disk (or make a copy of the track see Linking Tracks) before using autocorrect, and also saving any results that sound good to you before autocorrecting again.

Erasing a Track

There are two ways that you can eliminate an unwanted track. One simple way is to record something else into it, such as the next new track, or just press Space to record a stop code and end the track.

A more efficient way of eliminating tracks is to erase them from memory completely. This is done by typing E for **erase** while in the Edit Page. You will be prompted:

ERASE TRACK # (1-8) :

TYPE CONTROL-A FOR ALL
PRESS SPACE TO EXIT

You may erase an individual track by entering its number, or all tracks by holding CONTROL and pressing A. After making your selection, you will be asked "Erase Track?". Press either Y (yes) or N (no). Remember: Once you have erased a track you cannot get it back.

Linking Tracks

This feature allows you to copy data from one track (the source) and "link" it to the end of another (the destination). When linking tracks, your **source track** remains in its original form, even though its information now has been added to your **destination track**.

To Link Tracks

Press L while in the Edit Page. You will be prompted:

LINK A TRACK

SOURCE TRACK # (1-8):
DESTINATION TRACK:

PRESS SPACE TO EXIT

After entering the source and destination track numbers, you will be asked to confirm your choice. Remember: Once you have linked two tracks, they cannot be "un-linked". However, it is possible to "undo" a link by punching in to the destination track and "trimming" it off before the linked section. (See Punch In on Main Page).

After linking, you may change any aspect of the source track without affecting its copy in the destination track. You can take that same source track and repeatedly link it to any destination track for "pattern" effects. Tracks can be linked to themselves. You can build up varying patterns when you edit or mix the source track in between links.

Linking tracks can be more advantageous than looping them. When a track is looped it will repeat the same pattern, again and again, without variation. For example:

Part A/ Part A/ Part A/ Part A/ Part A/ Part A/ Part A/....

Linking tracks, gives you the ability to build repeating and varied patterns out of different segments repeatedly linked end to end. For example:

Part A/ Part B/ Part A/ Part B/ Part C/ Part A/ Part B/....

To Copy Tracks

Linking a source track to an empty destination track is a convenient way of making a copy of that track. This feature is useful for making a copy of a track before mixing it with another track or autocorrecting it.

Mixing Tracks

Although at first sight Master Tracks and Master Tracks Pro may appear to be "eight- track" sequencers, they are by no means restricted to the eight tracks appearing in the track display. In reality the program is an unlimited-track recording system. By mixing tracks, you can overdub and layer many tracks of MIDI data into a single track for playback.

The **MIX** feature allows any two tracks to be blended into a single track. All information including MIDI channel assignment is "mixed down" to a single track without losing performance quality.

To mix tracks: Press M while in the Edit Page. You will be prompted:

MIX 2 TRACKS

SOURCE TRACK # (1 - 8)
DESTINATION TRACK :

PRESS SPACE TO EXIT

After choosing your source and destination tracks, you will be asked to confirm your choices. Press Y (yes) or N (no). If you choose Y , the disk will start up and your tracks will be mixed together. This process erases your original source track and turns its FUNC "OFF". The destination track's CH setting will be automatically set to "00", setting your mixed MIDI data for multi-channel playback through a single track.

Remember: Tracks can be re-mixed as many times as you like. Because all tracks are made up of pure digital information, there is no degradation of sound quality through track "mixing". The only limitation you face is that only **16** different MIDI channels exist to separate your output information.

Also Remember: When mixing, you must have a data disk in your disk drive. Once mixed, tracks cannot be un-mixed, so you should make sure to save tracks to disk before mixing!

Exiting the Edit Page

When you are satisfied with all the editing you have performed, press the space bar to return to the Main Page. If you accidently press the space bar before you are ready to leave the Edit Page press E to return to the Edit Page.

"UTILITIES"

The following section describes system parameters for system control.

Drum Timebase (drum)

The **Drum Timebase** utility is to be used when working with non-MIDI drum machines connected to your Passport MIDI Interface by its DRUM-Sync connector (this control has no effect on MIDI drum machines connected via MIDI).

For Master Tracks : Press U to enter the Utilities Page then press 1 to toggle the Drum Timebase utility to send either **24** or **48** clocks per quarter note.

For Master Tracks Pro: Move the cursor on the Main page to Drum, then press Return to toggle between **24**, **48** or **96** clocks per quarter note.

Please Note: Non-MIDI drum machines will not stay in sync with your sequence when you use Fast Foward or Rewind.

Master Clock (clock/sync)

The master clock utility is also normally set to **INT** (internal). With this setting the program generates its own internal clock, ignoring clock information received over MIDI.

When the master clock is set to **MIDI**, the program will receive and synchronize to MIDI clocks generated by an external MIDI source connected to MIDI IN on the Passport MIDI Interface (i.e. MIDI drum machines, sequencers and external tape sync boxes). You should leave the Start/Stop set to INTernal for proper operation.

When the master clock is set to **TAPE**, the program can be synced to its own previously recorded tape-sync signal on tape (See Advanced Techniques).

For Master Tracks : Press U to enter the Utilities Page. Pressing 2 will toggle the Master Clock source between **INT** (internal), **MIDI** (external) and **TAPE.**

For Master Tracks Pro: Move the cursor on the Main page to Clock, then press Return to toggle between **INT, MIDI** and **TAPE.**

Punch In Track

For Master Tracks : Press U to enter the Utilities Page. Pressing 3 in the Utilities Page will let you set up a track to Punch In on during playback. Select the Punch In Track by first pressing 3 and then the track number 1 - 8 you wish to work on.

For Master Tracks Pro: The Punch in track is selected on the Format Page. Use the cursor keys to choose a track then press the Return key to set it for Punch in. You will see a √ by the selected track. When you Punch In, the program will switch the pre-selected track to **Record**, and a **"*"** will apear next to the affected track.

Please Note: You can only Punch In on a track once per play in the Main Page. Should you wish to redo the Punch In, or Punch In to another spot on the track, you must reset the Punch In Track on the Utilities Page.

Aftertouch

If you are using a synthesizer that features an aftertouch-sensitive keyboard like a DX-7 (not to be confused with a velocity-sensitive one), pressing harder on a key while it is depressed adds an effect to the sound (i.e. vibrato, pitchbend etc.). Some keyboards are more sensitive than others. Depending on the sensitivity of your keyboard, you might be sending out aftertouch information over MIDI more often then you think. An Aftertouch filter is provided to toggle the ability to record this information ON or OFF . Not recording Aftertouch information can save a tremendous amount of track memory.

For Master Tracks : Press U to enter the Utilities Page. Press 4 on the Utilities Page to toggle **Aftertouch** recording **On** and **OFF**.

For Master Tracks Pro: Move the cursor on the Main page to Aftertouch, then press Return to toggle between **ON** and **OFF.**

Looping Tracks

The **Loop** utility allows you to have all recorded tracks in a sequence repeat continually without reaching an end. When **ON** , each track of your sequence will "loop" back to it's beginning upon reaching the point at which you ended the track. Each track will loop **independently** of all other tracks. For example, track 1 may repeat every two measures, at the same time track 2 is repeating every ten measures.

For Master Tracks : Press U to enter the Utilities Page. Pressing 5 will toggle track looping **ON** or **OFF**.

For Master Tracks Pro: Move the cursor on the Main page to Loop, then press Return to toggle between **ON** and **OFF.**

Exiting the Utilities Page (for Master Tracks only)

When you are satisfied with all the changes you have made, press the space bar to return to the Main Page. If you accidently press the space bar before you are ready to leave the Utilities Page press U to return to the Utilities Page.

Quikstep Editor

Step TimeTutorial

Pressing Q from the Main Page will take you to Quikstep, the step-entry and editing section of Master Tracks and Master Tracks Pro. You can use Quikstep to create a track from scratch, or to convert and edit a "real-time" recording from the Main Sequencer section.

Before Quikstep is entered, the following menu will appear:

1 LOAD LAST WORK
2 START WITH NEW FILE

PRESS **SPACE** TO RETURN TO SEQUENCER

If you have changed your mind and would like to return immediately to the sequencer, hit the space bar. Otherwise, you must choose between loading the last Quikstep work you did, or starting from scratch. After you have made this choice by pressing the appropriate number key, you will find yourself on the Quikstep Main page. You will be presented with this list of options:

QUIKSTEP MAIN PAGE

C CONVERTER
D DISK STORAGE
E STEP EDITOR
U UTILITIES

PRESS **SPACE** TO EXIT

Pressing E from the Quikstep main page will take you to the heart of Quikstep, the **Step Editor**.

STEP EDITOR

```
Number Keys ->  ( 1 ) ( 2 ) ( 3 ) ( 4 ) ( 5 ) ( 6 ) ( 7 ) ( 8 ) ( 9 ) ( 0 )
                  4     6     12    18    24    36    48    72    96    144   <- Time Values
Parameters ->   CT#   CTV   PRE   AFT   PWL   VEL   ACC   ART   TMP   ***
                 49    56    48    56   -15    127   12    75    100          <-Parm Values
Header Line ->  MEM=36588        KEY=FLA   001. 1. 00      T     V     A
                ==========================================================

Input Line ->   [] []  START  [] []
                >
```

Quikstep Editor - Step Time 3 / 1

Don't be intimidated by all of the numbers and symbols located in the top portion of this screen; their meanings will be explained in detail in the **Step Editor** section below. Do not worry either about the specific time or parameter values on your screen, as they may differ from the above example.

On the bottom line you will find an inverted carat -≫. This cursor indicates that the program is ready to accept step input.

RECORDING YOUR FIRST QUIKSTEP TRACK

Step 1: On your synthesizer keyboard play middle "C". While you are holding the note, look at the monitor screen. The "start" message should move up one line and below it will appear:

C 5

Step 2: Continue to hold middle "C" key, and play a few more notes; for this example press the next "E" and "G" above it. Now add the next highest "C". The line below Start should now read:

C 5 E 5 G 5 C 6

If you played any black keys, they will be displayed as inverse letters. The abbreviation **FLA** appearing on the header line (upper screen section) tells you that all inverse letters represent flats. For example an inverse "D" is a "D" flat.

The numbers that have appeared after the note names are the **octave** numbers. Octave 0 is the lowest MIDI octave, and Middle "C" is C 5.

Step 3: Release all notes. Some numbers will be added to the right side of the screen, and the chord notation will move up the screen one line. It will look similar to this:

C 5 D 5 E 5 G 5 C 6.....24 100 75

The first of the new numbers is the chord's "time value". This value is expressed in MIDI clocks (24 per quarter note). The above example is a quarter note (24). The possible range is from 1 to 240 clocks.

The next number is the "velocity number". Its valid range is from 1 to 127.

The last number represents the chord's "articulation", the musical quality of being "legato" or "staccato" (long or short). Here it is expressed as a percentage, "75" meaning that the note will actually sound for 75 percent of the note's 24 clocks. (18 clocks). For the last 25% (6 clocks) it will be silent. Eight different articulation values are provided.

Recording a Quikstep Track cont.

Step 4: Set the time values of your next event, either note or rest, by pressing one of your computer's number keys (1 thru 0). Notice that these numbers are displayed at the top of your monitor screen.

When you press a number key, the time value directly below the selected number will "light-up" in inverse letters. This is the new assigned time value. You may select a new time value at any time, and also increase or decrease it by using the **CRSR ->** and CRSR <- keys.

Step 5: Repeat steps 1 through 4 several times to create a series of events. Play anything you want . Press the return key occasionally to enter **rests** at the assigned time value. When you are ready to hear your piece, move on to the next step.

Step 6: Press Control A to return to the beginning of your file. You will find the Start line at the bottom of your screen once more.

Step 7: Press space to play back your file. As the sequence plays, your file will scroll up the screen. Pressing space again will stop playback and freeze scrolling. Pressing the space bar will resume playback from your current location in the file.

Step 8: Press the <- key at the top left of the keyboard. You will now find yourself on the Quikstep Main Page.

QUIKSTEP MAIN PAGE

C CONVERTER
D DISK COMMANDS
E STEP EDITOR
U UTILITIES

PRESS **SPACE** TO EXIT

Step 9: Select C to enter the Converter .

CONVERTER PAGE

1. STEP FILE -> TRACK
2. TRACK -> STEP FILE

PRESS **SPACE** TO EXIT

Step 10: At this point press 1. You are going to convert your Step File to a Track for playback in the Main Sequencer. Select a track number (1 - 8) to convert your Step File to. You will be presented with transposition and channel assignments which may be changed in the Utilities Page of Quikstep.For now press Y for "yes". The conversion will take a couple of seconds for a very large file, and much less for a small one. When the file has been converted, your computer will "beep" once.

Recording a Quikstep track cont.

Step 11: Press space to return to the Quikstep page.

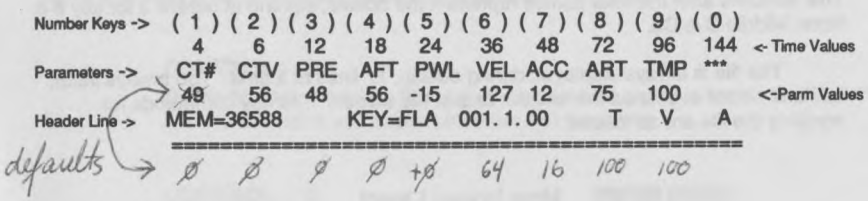
Step 12: Press space once more to move to the Main Sequencer.

Step 13: You may now play back the track you selected to convert to just as you would play back a real time track.

You have just created your first Step File with Quikstep. Please read over the following pages to learn more about Quikstep and its powerful step entry and editing features.

The Step Editor

Pressing E from the Quikstep Main Page will take you to the heart of Quikstep, the **Step Editor**.



Entering Notes and Rests

Note values are entered on the Input Line from your synthesizer keyboard connected to MIDI IN on the Passport MIDI Interface. When a key is depressed and held down, the program will treat all other key presses as simultaneous events, until either maximum notes (as set in the Quikstep Utilities Page) is reached, or until the keyboard is free of all key depressions. These notes will be listed on one line as a single "event" or "step" in your sequence file. The durations are set using the number keys on your computer to choose a Time Value

Rests are entered on the Input Line by pressing the Return key. The durations of rests are also set by using the number keys to choose a Time Value.

Entering Phrase Markers

You may enter a "phrase" marker at any point in your file, by pressing the / key. These markers can provide your Step File with "landmarks" to indicate segment end points (such as measures). Phrase Markers can be used to let you move quickly through your file.

Moving around the Step File

The bottom portion of the Step Editor Page is used to list the steps in your Step File.

Note names are displayed with normal letters representing natural notes, and inverse letters representing flats or sharps.

The numbers after the note names represent the octave, starting at octave 0 for key # 0. Note: Middle C is C5.

The file is always displayed during editing, 17 lines at a time. You always input, edit and delete events on the **bottom line** of the screen. The key commands for scrolling the file are as follows:

CRSR DOWN Move forward 1 event

CRSR UP Move backward 1 event

CONTROL - W Move forward to the next phrase marker

CONTROL - Q Move backward to previous phrase marker

CONTROL - A Go to the start of the file

CONTROL - Z Go to the end of the file

(In the last four commands, you must hold down the CONTROL key while pressing the specific **letter** key to complete the command.)

Space - Play from current position or stop play back.

Editing your file

Quikstep provides several commands for use in editing your files. Most of these commands involve copying events to or from a "Buffer". Quikstep maintains a Buffer that can hold up to 1000 notes. **Events copied into the Buffer are kept there until you Erase the Buffer - even when you go to or from the sequencer or shut down! Therefore it is a good practice to clear (erase) the contents of both the Step File and the Buffer before starting a new Quikstep file to make sure that data from previous tracks do not remain in memory.**

CONTROL - D

Delete the last event into the buffer. The deleted event is kept in the"Buffer" which will enable you to perform other edit functions.

CONTROL - C

Copy the last event into the buffer without changing the original event in the Step File. This command will copy the last entered event in its entirety into the buffer.

CONTROL - R

Return last event from buffer to Step File. Use this in combination with the CONTROL - D command to move a single event or group of events.

CONTROL - B

Copy an image of the entire "Buffer" into the Step File. This command in combination with CONTROL - D and CONTROL - C will enable you to move entire sections of your file, or repeatedly copy a section of your file.

CONTROL - E

Erase. This command will display an erase menu which provides you with the following options:

CRSR← Erase steps from the current position to the **start** of your file.
CRSR→ Erase from the current position to the **end** of your file.
CONTROL - A Erase **entire** Step File (ALL) except the Buffer.
CONTROL - B Erase **"Buffer".**
Pressing any other key will **cancel erase** and move you back to the Edit Page.

```
                    STEP EDITOR
Number Keys ->( 1 ) ( 2 ) ( 3 ) ( 4 ) ( 5 ) ( 6 ) ( 7 ) ( 8 ) ( 9 ) ( 0 )
                  4     6    12    18    24    36    48    72    96   144 <- Time Values
Parameters ->   CT#   CTV   PRE   AFT   PWL   VEL   ACC   ART   TMP   ***
                 49    56    48    56   -15   127    12    75   100        <-Parm Values
Header Line ->  MEM=36588        KEY=FLA  001. 1. 00     T     V     A
                ================================================

Input Line ->   [] []  START  [] []
```

SELECTING TIME VALUES

The numbers on the top of your screen represent your computer's number keys (1 thru 0). Any time value (represented on the line below these numbers) in a range of 1 to 240 may be assigned to these keys. The selected time value is highlighted, and may be increased or decreased by using the CRSR -> and CRSR <- keys. This scheme lets you have a total of ten different time values available for use at the "press of a number key". See Appendix 1 for a list of default time values.

```
Number Keys ->  ( 1 ) ( 2 ) ( 3 ) ( 4 ) ( 5 ) ( 6 ) ( 7 ) ( 8 ) ( 9 ) ( 0 )
                  4     6    12    18    24    36    48    72    96   144 <- Time Values
Parameters ->   CT#   CTV   PRE   AFT   PWL   VEL   ACC   ART   TMP   ***
                 49    56    48    56   -15   127    12    75   100        <-Parm Values
Header Line ->  MEM=36588        KEY=FLA  001. 1. 00     T     V     A
                ================================================

Input Line ->   [] []  START  [] []
```

SELECTING AND CHANGING PARAMETERS

in Comport 2

The third line from the top of your screen is the Parameter line. With Quikstep you can enter MIDI parameters such as velocity,aftertouch, preset changes and MIDI controllers into the Step file using the joystick. The line below the parameter line displays the data values for each parameter. (A complete list of all MIDI parameters is available in the MIDI SPEC 1.0 available from the International MIDI Association).

Joystick left/right movement is used to select one of the nine parameters. The selected parameter is displayed in inverse.

Joystick up/down movement is used to change the value of the currently selected parameter.

Pressing the **joystick button** will enter the selected parameter value into the Step File, unless either VEL (velocity) or ART (articulation) are selected. In these two cases, the velocity or articulation of the last event (if a note) will be changed to the selected value.

CT# (Controller Number)

This item will let you choose a specific MIDI controller by number. A list of MIDI controllers and their functions should be contained in your synthesizer's manual or you can get a listing of all assigned controllers in the MIDI SPEC 1.0 available from the International MIDI Association (a partial listing of controller numbers can be found in Appendix 2). In order to enter controller values into your Step File you must first select a controller number with **CT#.** You can then select the value for that controller using **CTV.**

CTV (Controller Value)

This item will allow you to select the value for the controller selected in **CT#** above. Controller information is entered into the step file by pressing the **joystick button** while this selection is highlighted.

PRE (Preset Sound)

This item will let you set the synthesizer preset (program) number you wish to use in your Step File. The preset number is entered into the step file by pressing the **joystick button** while this selection is highlighted.

AFT (Monophonic Aftertouch)

This item will let you set the amount of Aftertouch to store in the step file. Aftertouch information is entered into the step file by pressing the **joystick button** while this selection is highlighted.

PWL (Pitchwheel Amount)

This item will let you adjust the amount of pitch bend to store in the step file. Pitch Bend information is entered into the step file by pressing the **joystick button** while this selection is highlighted. To properly pitch bend a note you must insert Pitchwheel Amounts between tied notes. Don't forget to return pitch bend amount to "0" to restore proper pitch to the rest of your file.

Changing Parameters cont.

VEL (Velocity)

You can choose the velocity for new note events when this item is selected. Six scales of velocity resolution are available giving 127, 64, 32, 16, 8 or 4 different values. One of these scales is selected from the Velocity Scale item on the Configuration page. Velocity range is from 1 to 127 . This setting will affect any new notes entered. It can also replace the velocity value of notes already in the step file, by pressing the **joystick button** with "VEL" highlighted. This can also be done "on the fly" while listing or playing step files.

ACC (Accent)

Accent allows you to increase or decrease the velocity value of the current event (if a note) by a fixed amount. Pressing the ≪ key acts as a negative accent and pressing the ≫ key acts as a positive accent.

ART (Articulation)

In Quikstep "Articulation" refers to the percentage of the total note duration ("gate" time) that the note is actually on. There are eight different settings available 25, 38, 50, 75, 88, 99, 100 % (slur) and TIE. If a step is assigned a TIE articulation, then any notes in that step which exist in the previous step will not be retriggered. This setting will affect any new notes entered. It can also replace the articulation value of notes already in the step file, by pressing the **joystick button** with "ART" highlighted. This can also be done "on the fly" while listing or playing step files.

TMP (Playback Tempo)

Your step file's playback tempo can be adjusted with this selection. Overall playback tempo can be varied, even during playback.

Tempo changes can be stored in a file by pressing the **joystick button** while this selection is highlighted. Upon playback the tempo will always change to the entered value, regardless of the original tempo. The tempo range is 25 - 200 beats per minute.

Changing Duration

Master Tracks Pro only : Changing Durations (after entry into file)

The duration of an existing event can be changed by holding the **Control** key while pressing the arrow keys ≪, ≫ (to change the event by single clocks), or by holding the **Control** key then a number key (**0-9**) to change to a new preset value.

Header Line Information

```
Number Keys ->  ( 1 ) ( 2 ) ( 3 ) ( 4 ) ( 5 ) ( 6 ) ( 7 ) ( 8 ) ( 9 ) ( 0 )
                  4     6    12    18    24    36    48    72    96   144   <- Time Values
Parameters ->   CT#   CTV   PRE   AFT   PWL   VEL   ACC   ART   TMP   ***
                 49    56    48    56   -15   127    12    75   100         <-Parm Values
Header Line ->  MEM=36588        KEY=FLA   001. 1. 00         T     V     A
                ==========================================================
```

MEM (Memory)

The number listed after **MEM** gives you a current reading of memory available for recording your Step File in bytes.

KEY (Flats or Sharps)

Pressing control K will allow you to toggle the way black keys are displayed in the step file between either sharps (SHP) or flats (FLA). If set to FLA, an inverse "D" will represent a D flat. The same note displayed as C sharp would be displayed as an inverse "C" when set to SHP.

CLOCK

The number to the right of your velocity setting shows you where you are in the Step File in terms of clocks. This is the same clock that is used on the Main Sequencer Page. The current location at the point of insertion on the bottom line is displayed in measures, followed by number of beats (set by the BEAT value in the main sequencer), followed by the number of MIDI clocks.

nnn	.	n	.	nn
(Measure number)		(Beat)		(MIDI Clocks)
0001-9999		1-9		00-23

T (Time duration value)

The time durations of your entered events will appear in this column .

V (Velocity value)

The velocity value of each entered event will appear in this column.

A (Articulation value)

The articulation value assigned to each entered event will appear in this column.

EXITING THE STEP EDITOR

You exit the Step Editor by pressing the ⇦ key at the upper left of the keyboard. After exiting the Step Editor you will return to the Quikstep page.

The Converter

Pressing C from the Quikstep page will take you to the Converter Page.

The Converter Page is used to convert Step Files from Quikstep, to Tracks for use in the Main Sequencer.

It can also be used to convert live Tracks to Step Files, for step editing in Quikstep or for storage on disk as a Step File.

CONVERTER PAGE

1. STEP FILE -> TRACK
2. TRACK -> STEP FILE

SELECT BY NUMBER
PRESS SPACE TO EXIT

The Converter Page is where you will choose to convert a recording from a Step File to a Track (by pressing 1) or from a Track to a Step File (by pressing 2).

Before converting, the MIDI channel and transpose offset used in the conversion will be displayed and you will be prompted to confirm the choice. If you wish to change either the MIDI Channel or Transpose offset used by the Converter, you must do so on the Quikstep Utilities page.

The Converter Page is the link between Quikstep and the main sequencer. You can use it to capture a live Track in Quikstep for editing, or for saving the Track to disk as a Step File. This technique can be used to save individual tracks for later use in other compositions.

Pressing the space bar will take you back to the Quikstep main page.

Quikstep Disk Commands

Pressing D from the the Quikstep page will take you to the Quikstep disk page. This page is where you can save or load Step Files or Setup Files for use within Quikstep. This page will also let you save and load single tracks when used in conjunction with the Convert page and the Main Sequencer.

QUIKSTEP DISK PAGE

C	CATALOG
L	LOAD QUIKSTEP FILE
S	SAVE QUIKSTEP FILE
D	DELETE QUIKSTEP FILE
R	READ SETUP FILE
W	WRITE CURRENT SETUP

PRESS SPACE BAR TO EXIT

To select any of the disk options type the appropriate letter.

A STEP FILE is the Quikstep file that you create in the Step Editor or convert from a Track to a Step File. You can use Step Files to store individual Tracks for later use. Saving your Step Files will allow you to build up a library of individual parts, such as bass lines, rhythm parts or chord progressions that you can use in future compositions. To LOAD, SAVE or DELETE a Step File press the appropriate letter.

A SETUP FILE is a set of operating parameters for Quikstep. These parameters are displayed both on the top of your Step Editor screen and on the Quikstep Utilities page. You may save different Setup Files containing different sets of time, controller or configuration data for use when working in certain meters or with particular equipment. To READ (load) or WRITE (save) a Setup File press the appropriate letter.

Press space to return to the Quikstep page.

QUIKSTEP UTILITIES PAGE

Pressing U from the Quikstep Main page will take you to the UTILITIES page.

UTILITIES PAGE

1. PLAY CHANNEL	1
2. RCV TRANSPOSE	+0
3. PLAY TRANSPOSE	+0
4. VELOC. SCALE	0
5. MAX. NOTES	10
6 DRUM CLOCKS	24

SELECT BY NUMBER

PRESS SPACE TO EXIT

Play Channel

Pressing 1 from the Utilities page allows you to choose which MIDI channel (1 thru 16) your Step file will play back on. This selected MIDI channel will also be used when converting a Step File to a track. Use the **CRSR ->** and **CRSR <-** keys to select the MIDI channel and and then press **space** to enter it.

RVC Transpose

Pressing 2 from the Utilities page allows you to transpose the pitch of incoming notes from your synthesizer keyboard up or down anywhere within a two octave range (+ / - 24 1/2 steps). This feature therefore provides you with a means of recording input notes beyond the keyboard's normal range.

To select a transpose value for incoming data from your MIDI keyboard, use the **CRSR ->** and **CRSR <-** keys to raise or lower the pitch and then press **space** to enter it.

Play Transpose

Pressing 3 from the Utilities page allows you to transpose the pitch of your Step File during playback to your synthesizer up or down anywhere within a two octave range (+ - 24). You may also use this feature to transpose when converting a step file to a track.

To select a value for transposing a Step File during playback or when converting to a track, use the **CRSR ->** and **CRSR <-** keys to raise or lower the pitch and then press **space** to enter it.

Velocity Scale

Pressing 4 from the Utilities page allows you to select one of six different velocity scales for **paddle #1** for use in the Step Editor. This allows you to utilize 127, 64, 32, 16, 8 or 4 discrete velocity values, making it easier for you to control velocity in different situations. All scales have the same range: 15 to 127.

To select a velocity scale, use the **CRSR ->** and **CRSR <-** keys and then press **space** to enter it.

The six velocity scales are:

(0) = 127 values	(3) = 16 values
(1) = 64 values	(4) = 8 values
(2) = 32 values	(5) = 4 values

Maximum Notes

Pressing 5 from the Utilities page allows you to determine how many notes may be entered on a line in the Step Editor. You may choose 1 to 10 notes per line. For example, setting "maximum notes" to 1 makes entering monophonic lines very fast.

To select the number of maximum notes per line, use the **CRSR->** and **CRSR<-** keys and then press **space** to enter it.

Drum Clocks

Pressing 6 from the Utilities page, will toggle between 24 and 48 clocks per quarter note (for non-MIDI Drum machines only). This is a concern when clocking non-MIDI drum machines through the DRUM output of your Passport MIDI Interface.

EXITING QUIKSTEP

When you are finished with Quikstep, press the **space bar**. This will cause the following menu to appear:

1 SAVE WORK AND GO TO SEQUENCER
2 GO TO SEQUENCER W/OUT SAVING WORK

PRESS **SPACE** TO RETURN TO QUIKSTEP

If you select **1**, a Quikstep "workfile" will be saved to disk. This includes the current step file and any changes you may have made to the Step File header information and the Utilities Page. (If you experience any problems such as files being transposed or data not playing back on the right channel etc., please check to see if you have made any changes to the Utilities Page). Use this option as a convenient way of preserving your work, allowing it to be restored on your next entry to Quikstep.

If you select **2**, your current work will not be saved. Use this option when you do not need to preserve your work; it is a much faster route to the Sequencer.

If you have changed your mind, and wish to re-enter Quikstep, press **space**.

Song Mode

Tutorial

Step 1 : Record two short multi-track sequences in the Main Sequencer and save the Sequence files on your data disk. Name the files "FILE 1" and "FILE 2".

Step 2 : Press **S** from the Main Page to get to the Song Mode. After a few seconds you will see the following:

1 REBUILD LAST SONG
2 START WITH NEW SONG

PRESS **SPACE** TO RETURN TO SEQUENCER

Step 3 : Press **2** to Start with a New Song. You will now enter the **Song page.** Replace your program disk with the data disk that you stored "FILE "1 and "FILE 2" on in step 1.

MASTER TRACKS - SONG MODE
SONG PAGE
(C) 1985 PASSPORT DESIGN

SEQ	FILENAME	SIZE
1	—	
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		

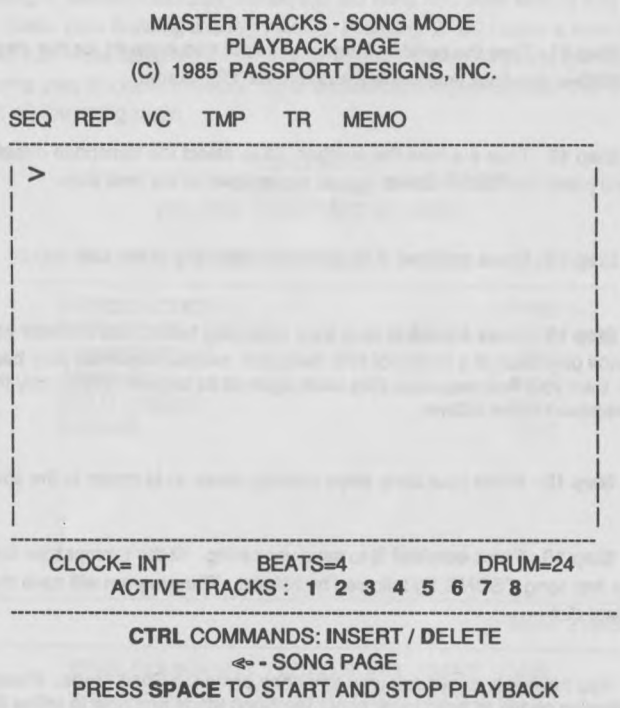
MEM: 36728

CTRL COMMANDS / **LOAD** SONG / **SAVE** SONG
DELETE SONG / **CATALOG** / **NEW** SONG / **QUIT**
← - PLAYBACK PAGE

Step 4 : You will see a cursor under the FILENAME column. Type the **name** of the first sequence ("FILE 1") that you saved in step 1 followed by **return**. The program will **load** in your first sequence.

Step 5 : The cursor will automatically move down to the next line. Type the name of the second sequence ("FILE 2") that you saved in step 1 followed by **return**. The program will **load** in your second sequence.

Step 6 : Press ⇐ to go to the **playback page**.


MASTER TRACKS - SONG MODE
PLAYBACK PAGE
(C) 1985 PASSPORT DESIGNS, INC.
SEQ REP VC TMP TR MEMO
>
CLOCK= INT
BEATS=4
DRUM=24
ACTIVE TRACKS : 1 2 3 4 5 6 7 8
CTRL COMMANDS: INSERT / DELETE
⇐ - SONG PAGE
PRESS SPACE TO START AND STOP PLAYBACK

Step 7 : You will see a flashing cursor under the **SEQ** column. Type the number 1 to select sequence #1 for this step. Press the **CRSR** → key **three** times to move under the **TMP** column.

Step 8 : Type a tempo of 100 for this step's tempo and press the CRSR down key to move down to the next step.

Step 9 : Type the number 2 to select sequence #2 for this step. Press the CRSR-> key **three** times to move under the **TMP** column.

Step 10 : Type a tempo of 140 for this step and press the CRSR down key to move down to the next step.

Step 11 : Type the number 1 again to select sequence #1 for this step. Press the CRSR-> key **four** times to move under the **TR** column.

Step 12 : Type a + then the number 12 to select the transpose offset for this step and press the CRSR down key to move down to the next step.

Step 13 : Press control A to go to the beginning of the step list.

Step 14 : Press space to hear your song play back. You will hear your first sequence play back at a tempo of 100, then your second sequence play back at a tempo of 140, then your first sequence play back again at its original tempo, only this time it will be transposed up an octave.

Step 15 : When your song stops playing, press <- to return to the song page.

Step 16 : Press control S to save your song. At the prompt type the **name** of your first song ("SONG 1") followed by return. The program will save the song on your data disk.

You have just composed your first song using the Song Mode. Please read over the following pages to learn more about the Song Mode and how to utilize this powerful compositional tool.

Song Page

You get to the Song Mode from the **Main Page** by pressing S.
NOTE: This will erase any sequence you were working on in the Main Sequencer. You should save your sequence if you wish to keep it before entering the Song Mode.

On your way to the Song Mode you will see the following screen:

1 REBUILD LAST SONG.
2 START WITH NEW SONG.

PRESS **SPACE** TO RETURN TO SEQUENCER

Pressing 1 will automatically rebuild the last song you were editing and put you in the Song Mode (see Building a Song below). Pressing 2 will create a new (blank) song and put you in the Song Mode. Pressing space will return you to the Main Page without erasing your tracks in memory. After answering the prompt with 1 or 2 you will find yourself on the **song page**.

SONG MODE
SONG PAGE
(C) 1985 PASSPORT DESIGNS

SEQ	FILENAME	SIZE
1	INTRODUCTION	1200
2	VERSE ONE	4213
3	VERSE TWO	6804
4	CHORUS	2116
5	SOLO / VERSE	5761
6	ENDING	1278
7		
8		
9		
10		
11		
12		

MEM: 21245

CTRL COMMANDS / **L**OAD SONG / **S**AVE SONG
DELETE SONG / **C**ATALOG / **N**EW SONG / **Q**UIT
<- - PLAYBACK PAGE

The Song Mode lets you create songs for playback consisting of sequences linked together. Your sequences will playback in the Song Mode just as they do on the Main Page, or you can select various options on the playback page that can modify the way your sequences play back. Song Mode economizes on memory usage by allowing multiple repetitions of sequences.

Moving Around The Song Page

The song page is where you load in the sequences from the disk that you will use in your song. The song page is also where you save and load whole songs. If you selected a **new** song on your way into the Song Mode, you will see a blank song page with the cursor positioned next to SEQ #1 underneath the FILENAME column.

In order to move around on the song page, you must have some sequences loaded in. Otherwise the cursor will sit on the top line. You can only move around between the sequences loaded on this page.

CRSR up - Move up to the next sequence. The screen will scroll if necessary to show up to 999 sequences.

CRSR down - Move down to the next sequence.

CONTROL - A Move to the first sequence at the top of the song page.

CONTROL - Z Move to the last sequence at the bottom of the song page.

SEQ

The **SEQ** number is the sequence number assigned to a sequence file when you load it in. You will use a sequence number to refer to a particular sequence for each step in the playback page. Over 900 sequences can be loaded (assuming that they will all fit in memory).

FILENAME

The Filename column is where you type the name of the sequence that you wish to load. To **load** a sequence, simply type its name (you do not have to type the suffix ".M8"). You can load sequences from several different diskettes if necessary.

You can remove a sequence from the song page by positioning the cursor on the filename to be removed and typing return. The program will prompt you "Remove this sequence from song ? Y/N :" Answer Y to remove the sequence or N to keep it. When the program removes a sequence from the song page, its filename will be replaced with:

* EMPTY

This will let you know that you removed a sequence and that it is no longer present in the song. (See SEQ in playback page).

SIZE

When a sequence is loaded, the program will first check to see if there is enough memory left to load the file. If so, it will load the file and display its size in bytes under the SIZE column.

MEM

For Master Tracks: Displayed at the bottom right of the sequence list is the total amount of available memory you have left in the Song Mode in bytes.

For Master Tracks Pro: Displayed at the bottom right of the sequence list is the Maximum Size for any one file that can fit in the Song Mode (in bytes). The total amount of available memory for Master Tracks Pro is over 72K bytes.

SONGS, SONGFILES AND WORKFILES

A Song consists of all the sequence names on the song page, the actual MIDI data for each sequence and the parameters displayed on the playback page which are stored in memory at any given time in the song mode.

A Song File consists of a disk file containing all of the sequences names on the song page, the actual MIDI data for each sequence, and the parameters displayed on the playback page. Song Files tend to be large and can take many seconds to load and save.

A Workfile in the song mode, consists of only the sequence names on the song page and the parameters displayed on the playback page. The actual MIDI data for each sequence is not stored in the workfile. You can automatically rebuild the last song you were working on when you enter the song mode from the workfile. In order to do this, you must save the workfile when you exit the song mode.

Using a Workfile instead of a complete Song File can save you time when moving between the song mode and other sections of the program. A Workfile will also let you edit and modify individual sequences contained within a song without having to keep track of which version of the sequence is actually stored in the Song File on disk. You can save a final Song File when you have completed the song and are ready to move on to a new composition.

Building A Song

You can begin building a song by selecting a NEW SONG and typing in the filenames for each sequence you wish to use in that song. If you wish to use a sequence several times in a song in several different places, you only have to load it in once. You complete building a song by filling in the parameters on the playback page. Note: a SONG is not complete until the parameters on the playback page have been filled in.

The **program** can automatically rebuild the last song you were working on whenever you enter the Song Mode and press ⇧ to REBUILD A SONG. This feature is very useful when you need to repeatedly edit individual sequences that are part of a whole song.

The program will load in a workfile with data and filenames from the last song you were working on and then attempt to rebuild your song from that information.

If the program cannot find a sequence on the disk or encounters another error, you will see a message similar to the following:

FILE NOT FOUND
RETRY / SKIP / ABORT : ?

RETRY - Pressing R will tell the program to try and **load** your sequence in again. You can swap your data disks prior to pressing R in order to get the right diskette in the disk drive.

SKIP - Pressing S will tell the program to **skip** this sequence and continue on to the next or return you to the song page. Do this if you have a bad file or I/O Error and wish to continue building the song anyway.

ABORT - Pressing A will tell the program to **stop** the loading process and return you to the song page.

Note: whenever the program rebuilds a song for you, it does not update any "Song" files that you have saved on the disk. Whenever you have a finished song, save the "Song File" on the disk again to make sure that any changes you made to the individual sequence files or header are saved in the "Song File".

Disk Commands

Songs are stored on the disk with the ".SM" suffix. You do not have to type the ".SM" suffix when loading, saving or deleting a song.

LOAD SONG - To **load** a song from the disk type control L from the song page and then type the name of the song to load at the prompt followed by return.

SAVE SONG - To **save** a song from the disk type control S from the song page and then type the name of the song to save at the prompt followed by return.

DELETE SONG - To **delete** a song from the disk type control D from the song page and then type the name of the song to delete at the prompt followed by return.

Disk Commands cont.

CATALOG - To **Catalog** the data disk and list the files, type control C from the song page.

NEW SONG - To clear all of song memory and start over with a **NEW** (blank) song, type control N from the song page and answer the prompt with Y to clear memory and set up a new song or N to keep memory and your current song intact.

EXITING COMMANDS

QUIT

Press control Q from the song page to **QUIT** the Song Mode and return to Master Tracks' Main Page.

Before exiting the Song Mode, the program will prompt you to save the current Workfile. Answer Y to save your Workfile and type its name at the prompt. This way you can automatically rebuild your song the next time you enter the Song Mode from the Workfile information. Answer N to leave the Song Mode without saving your latest work. (The last Workfile you saved will still be on the disk.)

Press ⇐ to switch between the **Song Page** and the **Playback Page** in the Song Mode.

Playback Page

After deciding upon a set of sequences to be used in your song, press <- from the **Song Page** and go to the **Playback Page**. The playback page is where you will connect the sequences together to form a song.

SONG MODE
PLAYBACK PAGE
(C) 1985 PASSPORT DESIGNS, INC.

SEQ	REP	VC	TMP	TR	MEMO
1	001	N	120	+00	Intro
2	002	Y	120	+00	Ist Verse
3	002	N	120	+05	2nd Verse
4	001	N	140	+00	Chorus
2	002	Y	120	+00	Ist Verse
5	002	Y	120	+05	3rd Verse
4	001	N	140	+00	Chorus
6	006	Y	120	+00	Ending

CLOCK= INT BEATS=4 DRUM=24
ACTIVE TRACKS : **1 2 3 4 5 6 7 8**

CTRL COMMANDS: INSERT / DELETE
<- - SONG PAGE
PRESS **SPACE** TO START AND STOP PLAYBACK

Moving Around The Playback Page

The Playback Page is where you enter the steps that define which sequences are played in what order. You can have an unlimited number of steps in your song as long as they will all fit in memory.

In order to move around on the Playback Page, you must have some steps displayed. Otherwise the cursor will sit on the top line. You can only move around between the steps entered on this page.

CRSR up - Move up to the next step. The screen will scroll when you have a lot of steps entered.

CRSR down - Move down to the next step.

Moving on the Playback Page cont.

CRSR -> - Move cursor to the right. As on the Format Page, moving to the right will also let you access the parameters at the bottom of the step list (Clock, Beats, Drum and Active Tracks).

CRSR <- - Move cursor to the left. As on the Format Page, moving to the left will also let you access the parameters at the bottom of the step list.

control A - Move cursor to the beginning of the file (first step).

control Z - Move cursor to the end of the file (last step).

SEQ

The column on the far left of the step display is the **Sequence** column. This is where you type the number of the sequence that you wish to play in this **step**. Type the sequence **number** that you wish to play in this step and press return or a CRSR key. The program will only let you type a Sequence number that is **loaded** on the song page.

When a sequence is removed from the song page, a "*" will appear next to any step in the playback page that references that sequence by number. This will let you know that the sequence for the particular step is no longer in memory. When the song plays back, steps with a "*" next to the SEQ number will be skipped.

REP

The **REP** column displays the number of times that this step will **repeat**. The repeat range is 0 -255. A repeat value of 0 will tell the program to skip this step during playback. A repeat value of 1 will tell the program to play this step once. To select a repeat value, position the cursor using the CRSR-> and CRSR<- keys and type a number from 0 to 255 and press return or a CRSR key.

REP determines the repeat count for the longest track of a given sequence. When a sequence plays back as a step in the Song Mode, the individual tracks may or may not loop depending on the setting of the LOOP parameter for that sequence.

IMPORTANT ! When using looping sequences in the song mode be sure that each track divides evenly into the longest track. Since the song mode will advance to the next step whenever the longest track has finished its repeat count, any other tracks still playing in the sequence will be cut short and the program will advance to the next step. This may cause some notes on the looping tracks to "hang" because these tracks do not divide evenly into the longest track. The cure for this is to only use looping tracks in the song mode that divide evenly in time into the longest track of a given sequence.

VC

The VC column lets you select whether or not preset (program) numbers are sent out at the beginning of each step. This feature is useful for controlling how your synthesizer will sound in a song. For example, if one step ends with notes playing a sound with a long decay or release, you may not want the next step to send preset changes as an unwanted "popping" sound could occur.

Preset changes are set up under the PRE column on the Format Page for each sequence. To send preset changes at the beginning of a step, position the cursor using the CRSR-> and CRSR<- keys and type Y under the **VC** column and press return or a CRSR key. To not send preset changes at the beginning of a step, type N under the **VC** column and press return or a CRSR key. Typing an N for VC in a step is the same as having all of the preset values on the Format Page set to 0.

TMP

TMP lets you select the starting Tempo for the step. To select a starting Tempo value for a step, position the cursor using the CRSR -> and CRSR <- keys and type a number from 25 - 200 and press return or a CRSR key. Each step can playback at a different tempo.

TR

TR lets you select a transpose offset for the step. To select a transpose offset for a step, position the cursor using the CRSR -> and CRSR <- keys and type either + (for up) or - (for down) followed by the number of half steps you wish to transpose by (0 to 24). Numbers entered without a + or - will be assumed to be a "+" and will be transposed up.

MEMO

The **Memo** field is provided to let you type comments about the step, similar to the "Instrument" column in the Format Page. It is automatically set to the sequence file's name, but you may change it to anything you like. To type a Memo, position the cursor using the CRSR -> and CRSR <- keys under the **Memo** column for the step and type your comment. Press return to enter the memo.

CLOCK

Positioning the cursor using the CRSR -> and CRSR <- keys and typing return will toggle the **CLOCK** source between **INT** (Internal), **MIDI** (External) and **TAPE**. This is the same master clock source used on the Utilities Page.

The master clock is normally set to **INT** (Internal). With this setting the Song Mode generates its own internal clock, and ignores any clock information received over MIDI. This is the mode to use when writing a Sync tone to tape from the Song Mode (See Advanced Techniques).

When the master clock is set to **MIDI**, the Song Mode will receive and synchronize to MIDI clocks generated by an external MIDI source connected to MIDI IN on the Passport MIDI Interface (i.e. MIDI drum machines, sequencers and sync boxes).

When the master clock is set to **TAPE**, the Song Mode can be synced to its own previously recorded tape-sync signal on tape (See Advanced Techniques).

For Master Tracks Pro Only:
MIDI Song Position Pointer is transmitted when the clock is set to **INT** and can be recieved when the Clock is set to **MIDI.**

BEATS (Beats per Measure)

Beats are used to set the metronome to "count in" a measure before playback begins. To set beats per measure, point to **BEATS** using the CRSR -> and CRSR <- keys and type a number between 0 and 9 and press return or a CRSR key to set your count in value.

DRUM

Positioning the cursor using the CRSR -> and CRSR <- keys and typing return will toggle the **DRUM** timebase to send either **24** or **48** clocks per quarter note. This parameter is used when working with non-MIDI drum machines connected to your Passport MIDI Interface by its DRUM-sync connector (this control has no effect on MIDI drum machines connected via MIDI).

ACTIVE TRACKS

ACTIVE TRACKS select the tracks (1-8) that will play back in each sequence for each step in the Song Mode. You can use ACTIVE TRACKS to mix down individual "song tracks" to a multi-track tape recorder when syncing to tape (See Advanced Techniques). ACTIVE TRACKS functions identical to "PLAY" and "OFF" in the Format Page.

To select which tracks will be Active for each sequence in the song, position the cursor using the CRSR -> and CRSR <- keys to point at ACTIVE TRACKS and type the number (1 - 8) of each track you wish to change.

When a track number is **inverted** it is set to PLAY. Typing each track number will toggle the track between PLAY and OFF. When you have finished setting up which TRACKS to be ACTIVE, press return or a CRSR key.

INSERT

Pressing control I will let you **INSERT** a blank **step** immediately above the step you are pointing to. You must assign a sequence number to this new step before moving on, or the INSERT will be ignored.

DELETE

Pressing control D will let you **DELETE** the **step** you are pointing to.

SPACE

Pressing space will start and stop **playback** of your song from the current cursor position. To playback from the beginning, press control A then space.
Note: You must have steps assigned to valid sequence numbers present in song memory in order to play back in the Song Mode.

STOP STEP

For Master Tracks Pro only:

Pressing Control S inserts a special "Stop" step that causes playback to stop when encountered. To resume playback you must manually advance to the next step then press Space to resume playing.

Playback Commands

During playback the following commands can be executed :

Tempo Change

Use the **CRSR** ⇨ and **CRSR** ⇦ keys to increase or decrease the tempo during playback. This can also be used when writing a sync track to introduce minor changes in tempo (see Advanced Techniques).

Note: The tempo will be "reset" at the beginning of each step to the **TMP** value specified for the step.

Exiting the Playback Page

Press ⇦ to leave the playback page and return to the song page.
Please Note: You can only exit the Song Mode from the Song page.

Exiting the Song Mode

QUIT

When you are ready to leave the Song Mode, press CONTROL Q from the **Song Page** to return to Master Tracks' Main Page.

Before exiting the Song Mode the program will prompt you to save the current workfile. It is a good idea to save the workfile if you have changed anything since entering the Song Mode. Answer Y to save the workfile and type its name at the prompt. Answer N to leave the Song Mode without saving the workfile.

If you accidently QUIT the Song Mode and wish to come back, press space to return to the Song Mode.

Getting Things Done

The Basics

This section will give you step by step instructions for working with Master Tracks and Master Tracks Pro. You should by now be familiar with your computer, as well as the fundamentals and lay-out of your program. If you find yourself uncomfortable with the terms, or program sections referred to in this part, then you should read over Part I and review the various sections of this program before you proceed.

Recording and Playback

Real Time Recording

Recording a track (Real Time)

Step 1 Boot your program disk. Once booted, The **Format Cursor** will be pointing at track #1.

Step 2 Press R to switch track into **REC** (record).

Step 3 Move the **Format Cursor** using the **CRSR** -» key to **BEATS** and type in a number (1 thru 9), to give yourself a metronome count and set the clock timing for the recording (i.e. 4 for 4/4 time; 3 for 3/4 time)

Step 4 Press the space bar to exit the Format Page. You will see the Main Page menu displayed below the Track Display.

```
USED:  00016        CLOCK:  001.1.00
LEFT:  36591
        DISK / EDIT / FORMAT
     UTILITIES / QUIKSTEP / SONG
PRESS SPACE BAR TO RECORD OR PLAY
```

Step 5 Press the space bar again to start recording. The program will automatically count off the number of Beats you set in step 3.

Step 6 Play something simple on your keyboard like a bass line or chord progression.

Step 7 Press the space bar to stop recording(on the nearest full beat). You will automatically return to the Format Page.

Step 8 Position the Format Cursor using the CRSR-» and CRSR«- keys under the **FUNC** column for track # 1 and press P to set the track in **PLA** (play).

Step 9 Press the space bar to exit Format Page.

Step 10 Press the space bar to begin playback. You should hear your track playback on your keyboard. You can change the sound on your keyboard using your synthesizer's control panel.

Step 11 You can stop and restart playback by pressing the space key once to stop and twice again to start. When ready to move on, stop playback and return to the Format Page.

Recording a second track (Real Time)

Step 1	From the Format Page press the up and down CRSR keys to point the format cursor at track # 2. Use the CRSR <- and CRSR -> keys to position the cursor under the **FUNC** column on track # 2.
Step 2	Press R to switch track # 2 to **REC** (record). The previous track will automatically switch to **PLA** (play).
Step 3	Press the space bar to exit the Format Page.
Step 4	Press the space bar to begin recording.
Step 5	Play your keyboard to overdub a new part. You should hear your first part play back while you are recording the second part.
Step 6	Press the space bar to end recording.
Step 7	Repeat steps 1 - 6 to record another track if you wish.

Mixing Tracks (same channels)

Step 1	Follow the procedure above for "recording a track" and "recording a second track", and making sure to assign the same MIDI channel to both tracks.
Step 2	From the Main Page press E to enter the Edit Page.
Step 3	Press M to **mix** tracks.
Step 4	Type in the number of your source track.
Step 5	Press return
Step 6	Type in the number of your destination track (the track you want to mix to).
Step 7	Press return.

Mixing Tracks (different channels)

Step 1	Follow the procedure above for "recording a track" and "recording a second track", making sure to assign a different MIDI channel to each track.
Step 2	From the Main Page press E to enter the Edit Page.
Step 3	Press M to **mix** tracks.
Step 4	Type in the number of your source track.
Step 5	Press return
Step 6	Type in the number of your destination track (the track you want to mix to).
Step 7	Press return.

Linking Tracks - Repeating or adding a section to a track (copy track)

Step 1	Follow the procedure for "recording a track" to record the segment you wish to repeat.
Step 2	Make sure you have at least one blank track available.
Step 3	From the Main Page, press E to enter the Edit Page.
Step 4	From the Edit Page, press L to **link**.
Step 5	Type in the number of the track containing your short segment as your source track.
Step 6	Press return
Step 7	Type in the number of a blank track as your destination track.
Step 8	Press return
Step 9	Repeat steps 4 thru 8 for each time you wish the segment to repeat.

Looping Tracks - Playing it over and over again

For Master Tracks:

Step 1	From the Main Page, press U to enter the Utilities Page.
Step 2	From the Utilities Page press 5 to turn **loop tracks** to ON.
Step 3	Press the space bar to return to the **Main Page**.
Step 4	Press the space bar once more to begin playback.

For Master Tracks Pro:

Step 1	**Move the cursor to Loop**
Step 2	**Press Return to toggle Loop ON/OFF**

Channelizing Data - Playing music on more than one keyboard

Step 1	From the Format Page choose a track that is already recorded and move the format cursor to point to the **CH** column.
Step 2	Choose which keyboard you wish to have play the information recorded on that track and remember its MIDI channel.
Step 3	Select the MIDI channel (1 thru 16) and type in the number.
Step 4	Repeat steps 1 through 3 for each track, and keyboard that you wish to have play each track.
Step 5	Press space and space again to hear the tracks.

Saving and Loading Sequences

Saving Sequence Files

It is a very good idea to save your work periodically while recording, both as a whole, or in its pieces (prior to mixing, linking or autocorrecting).

Step 1	From the Main Page, press D to enter the Disk Page.
Step 2	Press S to **save** file.
Step 3	Type in it's name and press Return. You should not type ".M8" at the end of the filename.

Loading Sequence Files

Step 1	From the Main Page press D to enter the **Disk Page**
Step 2	Press L for **load**.
Step 3	Type the name of the piece you wish to retrieve from the disk (be careful to spell the name exactly as it appears in the catalog, and do not include the file type i.e. ".M8")
Step 4	Press Return.

Changing Information and Playback

Solo - Listening to only one track during playback.

Step 1	From the Main Page press the space bar to begin playback.
Step 2	Hold down the Shift key.
Step 3	Press the number 1 - 8 of the track you wish to hear in solo.
Step 4	Press 0 to un-solo the track.

Mute - Turning off some tracks during playback

Step 1	From the Main Page press the space bar to begin playback.
Step 2	Press the **number** 1 - 8 of the track you wish to **mute**.
Step 3	Press the same **number** 1 - 8 to **un-mute** the track or press 0 to un-mute all tracks.

Transposing - Playing back your music in a new key

Step 1	From the Format Page press the CRSR-> or CRSR<- keys until the format cursor points at **TRANS**.
Step 2	Type either a + to raise the key or a - to lower the key.
Step 3	Type in the number of half steps you wish to transpose by (1 - 24).
Step 4	Press Return .
Step 5	Press space to hear the transposed sequence.

Changing Tempi - Changing the speed of your music during playback

Step 1	From the Main Page press the space bar to begin playback.
Step 2	Press the CRSR -> key to increase the music's tempo.
Step 3	Press the CRSR <- key to decrease the music's tempo.

Autocorrecting Tracks

Step 1	From the Main Page press E to enter the Edit Page.
Step 2	After entering the Edit Page, press A to **Autocorrect**.
Step 3	Type in the number of the track (1 - 8) you wish to correct, or hold down the CONTROL key and press A for all.
Step 4	Choose the duration value you want to correct your track to and press its corresponding number.
Step 5	Press return

Please note: It is best to Autocorrect to a short note duration if you are not sure of your choice. You cannot un-correct a sequence, but you can re-correct to a longer note duration. It is a good idea to either save the whole sequence on disk prior to autocorrecting, or link the track to be corrected to an empty track to save a copy of it prior to autocorrecting.

Working with Drum Machines

Drum Method one: Sending aClock Code to your MIDI drum machine
(Using your computer as the master clock)

Step 1 From the Main Page, press U to enter the Utilities Page.

Step 2 Set Utility **2** to read as follows:

UTILITIES PAGE

1.	DRUM TIMEBASE	24
2.	MASTER CLOCK	**INT**
3.	PUNCH IN TRACK	OFF
4.	AFTERTOUCH	OFF
5.	LOOP TRACKS	OFF

PRESS SPACE TO EXIT

Step 3 Make sure that your drum machine is set up to receive **External** MIDI clocks, and **External** MIDI start/stop.

Drum Method two: Clocking Master Tracks from your MIDI drum machine
(Using your MIDI drum machine as the master clock)

Step 1 From the Main Page, press U to enter the Utilities Page.

Step 2 Set utility **2** to read as below:

UTILITIES PAGE

1.	DRUM TIMEBASE	24
2.	MASTER CLOCK	**MIDI**
3.	PUNCH IN TRACK	OFF
4.	AFTERTOUCH	OFF
5.	LOOP TRACKS	OFF

PRESS SPACE TO EXIT

Step 3 Make sure that your drum machine is set up to **send** MIDI clocks, and **send** MIDI start /stop.

Step 4 Press space to return to the Main Page, set track(s) to Play.

Step 5 Press space, then start your drum machine to begin playback. The Sequence or Song will now follow any tempo information set by the drum machine. Note: if you decide to back out while the program is waiting for MIDI clocking information, you must hold down the **RUN / STOP** key and then press **RESTORE**.

Drum Method three : Sending a Clock to a **non- MIDI** drum machine.
(Using your computer as the master clock)

Step 1 Consult your Passport MIDI Interface manual for correct hook up of your drum machine to the **DRUM** connector on your Interface.

Step 2 From the Main Page, press U to enter the Utilities Page.

Step 3 Set utility **2** to read as follows:

UTILITIES PAGE

1.	DRUM TIMEBASE	24 (or 48)
2.	MASTER CLOCK	**INT**
3.	PUNCH IN TRACK	OFF
4.	AFTERTOUCH	OFF
5.	LOOP TRACKS	OFF

PRESS SPACE TO EXIT

Step 4 Make sure that your drum machine is set up to **receive** external clocks.

Master Classes

Advanced Techniques

Creating a track one note at a time (single step entry)

Step 1	Press Q from the Main Page, to enter Quikstep.
Step 2	Press E to enter the Step Editor.
Step 3	Choose the time value for each entry by selecting a number key.
Step 4	If first entry is a **note** or **chord**, press the appropriate key or keys on your synthesizer keyboard.
Step 5	If entry is a **rest** press Return.
Step 6	Repeat steps 3 through 5 for each entry.

Correcting mistakes in a track (punch in/out)

Real-time correction:

For Master Tracks:

Step 1	Press U from the **Main Page** to enter the **Utilities Page**.
Step 2	Press 3 to assign the Punch In track.
Step 3	Type in the number of the track you wish to Punch In to.
Step 4	Press the space bar to return to the Main Page.
Step 5	Press the space bar once again to begin playback.
Step 6	Press Return at the point you wish to **Punch In** and begin recording - you will see a * on the track.
Step 7	**Play** the corrected part on your keyboard.
Step 8	Press Return to **Punch Out** and end recording.

For Master Tracks Pro:

Step 1	On the Format Page, set the cursor to point to the track you wish to punch in on.
Step 2	Press Return to assign the Punch In track - you should see a √ by the selected track.
Step 3	Press the space bar to begin playback.
Step 4	Press Return at the point you wish to **Punch In** and begin recording - you will see a * on the track.
Step 5	**Play** the corrected part on your keyboard.
Step 6	Press Return to **Punch Out** and end recording.

Step-time correction:

Step 1	Follow steps 1 through 5 as listed in "Real-time correction" above.
Step 2	Press RUN / STOP to **pause** sequence **before** the point you wish to Punch In at.
Step 3	Press the CRSR -> key to advance your sequence one **clock** at a time until you reach the exact point that you wish to Punch In at.
Step 4	Press Return to **Punch In** and begin recording.
Step 5	Press the CRSR -> key to add rests (one clock at a time) to your sequence or hold the new notes on yoursynthesizer keyboard and press the CRSR -> key to advance the clock.
Step 6	Remember to **hold** the keys you wish to hear down while advancing the clock to set the duration of the notes. Remember also to **release** the keys and advance the clock to set the duration of any **rests** you want recorded.
Step 7	Press Return once again to **Punch Out** and end recording.

Correcting mistakes in a track - Step Editing using Quikstep.

Step 1	Enter Quikstep from the Main Page by pressing Q and **Convert** the track to be edited into a Step File. Select the Step Editor by pressing E from the Quikstep page.
Step 2	Use the up and down CRSR keys to position the mistake at the bottom entry position on the Step Edit screen.
Step 3	Press Control-D to delete the event.
Step 4	Follow Steps 3 through 5 in "Creating a track one note at a time" above to enter the corrected event.

Blending (mixing) real-time and step-time tracks

Step 1	Follow the procedure in Main Tutorial for "recording a track" and in Quikstep Tutorial for "recording a track one step at a time".
Step 2	From the Main Page press E to enter the Edit Page.
Step 3	Press M to **mix** tracks.
Step 4	Type in the number of your "real-time" source track.
Step 5	Press return.
Step 6	Type in the number of your "step-time" destination track (the track you want to **mix** to).
Step 7	Press return.

Alternating real-time and step-time tracks

Step 1	Follow the procedure in Main tutorial for "recording a track" and in Quikstep Tutorial for "recording a track one step at a time".
Step 2	From the Main Page press E to enter the Edit Page.
Step 3	From the Edit Page, press L to **link**.
Step 4	Type in the number of the track containing either your step-time track or real- time track as your source track.
Step 5	Press return.
Step 6	Type in the number of the track not chosen in Step 4 as your destination track.
Step 7	Press return.
Step 8	Repeat steps 1 through 7 for each time you wish the segment to repeat.

Adding more to the end of a track

Method 1 - (Punch In)

Step 1	Set the track you wish to add to as your Punch In track (as above).
Step 2	Press space to return to the Main Page.
Step 3	Press space to begin playback.
Step 4	Press return just prior to the end of your recorded track to Punch In.
Step 5	Play the additional part on your synthesizer keyboard.
Step 6	Press return to Punch Out and space to end recording.

Method 2 - (Quikstep)

Step 1	Enter Quikstep from the main page by pressing Q and Convert the track that you wish to add to into a Step File. Select the Step Editor by pressing E from the Quikstep page.
Step 2	Use Control-Z to move to the end of your Step file.
Step 3	Enter your additions following the steps for creating a step-file.
Step 4	Convert the step file back to a main sequencer track.

Method 3 - (Mixing)

Step 1	Follow the Main Tutorial for recording a second part.
Step 2	Do not record anything on the second track until you hear your first track end. When you reach your first track's end begin playing the additional part.
Step 3	Press space to end recording.
Step 4	Follow the procedure for Mixing two tracks.

Method 4 - (Linking)

Step 1	From the Format Page turn your original track Off.
Step 2	Place a second track in record.
Step 3	Play the additional part to be added on your synthesizer keyboard.
Step 4	Follow the procedure for linking two tracks using your second track as the source track and your first as the destination.

Delaying a track - Adding a rest to the beginning of a track

Method 1 (Linking)

Step 1	Record a track in the Main Page that has only a short rest recorded in the track (start and stop the recorder quickly).
Step 2	Link the track you wish to delay to the track with the short rest in the beginning that you just recorded.
Step 3	Playback the resulting track to hear the delay.

Method 2 (Quikstep)

Step 1	Press Q from the Main Page to enter Quikstep.
Step 2	Convert the track to be delayed into a Step file.
Step 3	Press the space bar to exit the convert page and return to the Quikstep page.
Step 4	Press E to enter the Step Editor.
Step 5	Select a time value for your delay by pressing a number key.
Step 6	Press Return. This will enter a **rest** at the begining of the track you have just converted to a Quikstep file.
Step 7	Press ⇐ to exit the Step Editor and return to the Quikstep page.
Step 8	Convert the step file you have just edited back to a track.
Step 9	Return to the Main Page to play back your track.

Transposing a single track

Method 1 (Quikstep)

Step 1	Follow the Main Tutorial for "recording a track" .
Step 2	Press Q to enter Quikstep mode.
Step 3	Press C to from the Quikstep page to enter the converter page.
Step 4	Select 2 to convert your track to a Step file.
Step 5	Press space to return to the Quikstep page.
Step 6	Select U to enter the Utilities page.
Step 7	Select 3 from the Utilities page for **play transposition**.
Step 8	Type in the number of half steps you wish to transpose by.
Step 9	Press space to return to the Quikstep page.
Step 10	Press C to from the Quikstep page to enter the converter page.
Step 11	Select 1 to convert your Quikstep file to a track.
Step 12	Press space to return to the Quikstep page.
Step 13	Press space to return to the main sequencer. The track you converted to will contain the transposed MIDI data.

Please remember to reset the play transposition in the Quikstep Utilities back to the original setting.

Method 2 : (Main sequencer)

Step 1	Follow the Main Tutorial for "recording a track". Remember the last clock value reached for this track.
Step 2	Set the track **FUNC** to Play.
Step 3	Move the format cursor to **TRNS**, and type in the number of half steps you wish to transpose by.
Step 4	Connect a MIDI cable from the MIDI Out of your Passport MIDI Interface to the MIDI In on your Interface.
Step 5	Place a second track in Record.
Step 6	Press space to begin recording your second track.
Step 7	When the clock reaches the value you remembered in step 1, press space to end recording.
Step 8	Return your MIDI cables to their original hook-ups. The second track will now contain the first track transposed.

Synchronizing to tape or External MIDI clocks

Step 1 Set Master Clock to either **MIDI** or **TAPE** depending upon which you are using for a clock source. If you are recording a Song you can set the CLOCK to **MIDI** or **TAPE** on the Song Mode Playback Page.

Step 2 Master Tracks will now be synchronized to the clock source you selected. Set Master Tracks to Playback by pressing the space key from the Main Page or from the Playback page in the Song Mode. You must then start up the external source (MIDI Machine or Tape Deck) in order for Master Tracks to start playback in sync. Note: if you wish to back out while waiting for MIDI clocks, hold down the **RUN / STOP** key and then press **RESTORE**.

Recording with a multi-track tape recorder

* Note see 4/12

Step 1 Record your tracks on Master Tracks as you would normally. If you are using one keyboard, and wish to end up with a multi-timbred arrangement on tape, take care to keep each track's MIDI information on a different **MIDI channel**.

Step 2 Connect the tape sync output on your Passport MIDI Interface to the line-in of an outside track on your tape deck. Connect the line-out of the same track on your tape deck to the tape sync input on your Interface. (Consult your Interface manual for these connections.) Master Tracks is always writing a sync leader tone when on the Main Page and Song Mode Playback Page prior to playback.

Step 3 Place your tape deck in record and start the tape rolling. Let a few moments of tape roll by to record the sync leader tone.

Step 4 Press the space bar at the spot where you wish to begin playback of your sequence / song. The program will write a tape sync signal to the tape while the piece plays back. If you monitor the sync tone, you will hear it drop in pitch on the down beat.

Step 5 When your sequence / song has ended playback, rewind your tape deck and prepare it for playback of track #1.

Step 6 Set the Master Clock to **TAPE**. If you are recording a Song you can set the CLOCK to TAPE (or MIDI) on the Playback Page.

Step 6A. *

Step 7 Press the space bar to return to the Main Page. Be sure that the track you want recorded on tape is set to PLAY on the Format Page and all other tracks are OFF. Be sure that your keyboard is set to receive on that track's MIDI channel. (If you are recording a song you can set ACTIVE TRACKS to playback one track at a time on the Playback Page.) * See 4/13

Step 8 Press the space bar again for sequencer start. Your sequencer will wait until it receives the sync signal from tape to begin playback. If you wish to back out at this point, hold down the **RUN/STOP** key and press **RESTORE**.

Step 9 Set your tape deck to play the tape sync track.

Step 10 Set your tape deck to record your first keyboard part on an open track. (Not the tape sync track!)

Step 11 Start your tape deck. Master Tracks will begin playback when it reaches the sync signal.

Step 12 Repeat Steps 8 through 12 for each track you wish to record.

Step 6A.* Patch chord must be run from output (mono/or stereo) of keyboard/synthesizer to line input of multi-track tape recorder in order to record subsiquent passes. Note: don't record over Sync-tone track (see step 10).

NOTES

Ch on 2/5 and notes on 6/6
To achiere multi-timbred arrangements as you are recording sequences you must assign different Ch #'s to (1 thru 16) each part you want to be played back using a different preset (instrumentation)

i.e.:

Tr	Func	Ch	Pre	Memo
1	Pla	01	001	Piano
2	Pla	02	006	Brass Ens
3	Pla	03	011	Elec Piano

when played back you will then hear 3 parts played by 3 (different) instruments).

Quikstep
Note Duration values

The following table lists the default note and rest values (in **BOLD** type) and some of the more common note values you can use in the Quikstep Step editor.

Since all standard MIDI timing information is based on 24 clocks per quarter note, this table is based on that value.

DURATION NUMBER	NOTE VALUE
2	Thirty-second note triplet
3	**Thirty-second note**
4	Sixteenth note triplet
6	**Sixteenth note**
8	**Eighth note triplet**
9	dotted Sixteenth note
12	**Eighth note**
16	Quarter note triplet
18	dotted Eighth note
24	**Quarter note**
36	**dotted Quarter note**
48	**Half note**
72	**dotted Half note**
96	**Whole note**
144	**dotted Whole note**

Quikstep
Controller Numbers

The following partial listing contains some of the confirmed MIDI controller numbers you can enter into a Quikstep Step file. Since some of the following information has just been established, please note that not all synthesizers will conform to this listing. Specific information regarding MIDI controller numbers and valid controller values should be listed in your synthesizer owners' manual and could also be found in the IMA MIDI 1.0 Spec.

Controller numbers 0 thru 63 are continuous controllers with a valid range of 0 thru 127, while #'s 64 thru 121 are defined as continuous switches with most having a value of 0 for OFF and 127 for ON.

All other controller numbers are either undefined or in the process of being defined - please contact the International MIDI Association (818-505-8964) for up to date info.

CONTROLLER #	FUNCTION
1	Modulation Wheel or lever
2	Breath Controller(Yamaha)/VCF Mod.(Korg)
4	Foot Controller
5	Portamento time
6	Data entry
7	Main Volume
32-63	Least Significant Bit for Values 0-31
64	Damper Pedal
65	Portamento
66	Sustenuto
67	Soft Pedal

Please see our newsletter "THE INTERFACE" for updated information regarding the use of MIDI controller numbers.

MAIN SEQUENCER / REAL TIME RECORDING

FORMAT PAGE Commands

CRSR <-- Move cursor to the left; Select parameter to change.

CRSR --> Move cursor to the right; Select parameter to change.
CRSR UP/ CRSR DOWN - Move cursor to select track.
Track functions: **R** - RECORD **P** - PLAY **O** - OFF
SPACE BAR - Exit format screen, enter Main Page.

MAIN PAGE Commands

D - Disk page **E** - Edit page **F** - Format page
U - Utilities page **Q** - Quikstep mode **S** - Song mode

CRSR —> Tempo increase during PLAY **CRSR <—** Tempo decrease during PLAY
1 thru 8 - Track mute **RUN/STOP** -Pause On/Off (see below)
(Shift)1 thru 8 - Track solo. **SPACE BAR** - Start/Stop Record/Play track(s)
RETURN - Punch-in RECORD while sequencer is in play (See **U**tilites to set track #)

RUN/STOP (PAUSE) commands:

F - Fast forward **—>** - Single step advance
R - Rewind (no audio) **<—** - Single step rewind (no audio)
RUN/STOP - Resume playback **SPACE BAR** - Stop, return to Format Page
RETURN - Step Time Punch-in RECORD (make sure to Set track #)

EDIT PAGE Commands

A - Auto-correct chosen tracks **E** - Erase chosen track(s)
L - Link(Copy) a track to the end of another track **M** - Mix a track into another track
SPACE - Exit Edit page, return to Sequencer

UTILITES PAGE Commands

1 - Toggle **24** and **48** clocks pqn for non-MIDI drum machine sync
2 - Toggle **INT**ernal, **MIDI**, and **TAPE** clock source
3 - Punch in track - use **#1 to 8** to select
4 - Toggle **ON / OFF** the recording of after-touch
5 - Toggle **ON / OFF** independent track looping
SPACE - Exit Utilites page, return to Sequencer

DISK PAGE Commands

C - Catalog the files on data disk drive
L - Load a sequence file from the data disk
S - Save a sequence to the data disk
D - Delete a sequence from the data disk
R - Read(Load) a MIDI 4 or 4+ file
W - Write(Save) Tracks 1-4 as a MIDI 4+ file
F - Initalize a blank disk
SPACE - Exit Disk page, return to Sequencer

QUIKSTEP™

****

MAIN PAGE Commands

C - Enter Converter Page
D - Enter Disk Page
E - Enter Step Editor
U - Enter Utilites Page

SPACE - Exit to Main Sequencer

****

CONVERT PAGE Commands

1 - Convert a Step File to a Sequence Track
2 - Convert a real-time Track to a Step File

SPACE - Exit to Quikstep Main Page

****

DISK PAGE Commands

C - Catalog files on the data disk
L - Load a Quikstep Step file from the data disk
S - Save a Quikstep Step file to the data disk
D - Delete a Quikstep Step file from the data disk
R - Read (Load) a Quikstep Setup file (header and utilites information) from the data disk. (Read ORG will load the default original setup file)
W - Write (Save) a Quikstep Setup file to the data disk

SPACE - Exit to Quikstep Main Page

****

UTILITES PAGE Commands

Press **number** to select, use **CRSR->** and **CRSR<-** to change.

1 - PLAY CHANNEL(#1 to 16) for Quikstep file - use **-->, <--** keys to select
2 - RECIEVE TRANSPOSE (+/- 24 1/2 steps) allows for transposition of incoming MIDI data - use **-->, <--** keys to raise or lower the pitch of notes coming from your synthesizer (use to input notes beyond the range of your keyboard)
3 - PLAY TRANSPOSE (+/- 24 1/2 steps) allows for transposition of outgoing MIDI data - use **-->, <--** keys to raise or lower the pitch of notes going to your synthesizer
4 - VELOCITY SCALE (#1 to 6) lets you use 6 different sets of velocity values to control the entering of velocity information into the Step file
5 - MAXIMUM NOTES(#1 to 10) determines how many notes may be entered per line in a Quikstep file
6 - DRUM CLOCK toggles between 24 and 48 clocks per quarter note for non-MIDI drum machines only.

SPACE - Exit Quikstep Utilites, return to Quikstep Main page.

QUIKSTEP™

STEP EDITOR Commands

Movement commands

Control - A	Go to start of file.
Control - Z	Go to end of file.
Control - Q	Go back to the previous phrase marker.
Control - W	Go forward to the next Phrase marker.
CRSR down	Go forward 1 event.
CRSR up	Go back 1 event.

Edit commands

Control - B	Copy buffer image to the step file.
Control - C	Copy 1st event into the buffer from the step file.
Control - D	Delete first event into buffer.
Control - R	Retrieve last event entered into buffer back into the file.

Erase commands

Control - E	Enter the erase menu.
CRSR <–	Erase from the begining to current insert point.
CRSR –>	Erase from the current insert point to the files end.
Control - A	Erase entire step file (except the buffer)
Control - B	Erase the buffer.

Parameter commands

0-9	Select duration preset
CRSR ->	Increment current duration preset.
CRSR <-	Decrement current duration preset.
Return	Enter a rest (current selected duration preset)
/	Enter a phrase marker.
<	Add accent to the velocity of last entered event.
>	Subtract accent from the velocity of last entered event.

← - Exit Step Editor, return to Quikstep Main Page

SONG MODE

Entering Song Mode

S - Enter song mode from Main Sequencer
1 - Rebuild last Song worked on in Song Mode
2 - Start with a new Song (assemble a new Song from sequences on disk)
SPACE BAR - Exit Song Mode, return to Main Sequencer

Song Page Commands.

[Control] L - Load a Song from the data disk.
[Control] S - Save a Song to the data disk.
[Control] D - Delete a Song from the data disk.
[Control] C - Catalog the files on the data disk.
[Control] N - Initalize to a New Song, clear memory of current Song.
[Control] Q - Quit, return to Main Sequencer.

[Control] A - Move to the first sequence in the Song
[Control] Z - Move to the last sequence in the Song
CRSR DOWN - Move down to the next Sequence
CRSR UP - Move up to the next Sequence

RETURN (when in Filename column) - Delete file(sequence)Y/N? from Song

<= - Toggle to Playback Page

Playback Page Commands

SEQ - Sequence number - use number keys to enter
REP - Number(0-255) of Repeats for that step - use number keys to enter
VC - Send a Voice(Preset) Change at beginning of step Y/N?
TMP - Tempo of step - use number keys to enter
TR - Transposition (+ or - 24 1/2 steps) of step - use number keys to enter

CLOCK - INTernal/MIDI/TAPE timing source - use return to select
BEATS - Metronome "count in" - use number keys to enter
DRUM - Non-MIDI clock 24/48 ppq - use return to select
ACTIVE TRACKS - Play highlighted Tracks - select with number keys

CRSR-> - Move cursor to the right **CRSR<-** - Move cursor to the left

[Control] A - Move cursor to the first step in the Song
[Control] Z - Move cursor to the last step in the Song
[Control] I - Insert a sequence at this point in the Song file
[Control] D - Delete this sequence from the Song file
CRSR Down - Move down to the next step in the Song
CRSR Up - Move up to the next step in the Song

<= - Toggle to Song Page

SPACE - Start and stop playback of Song

NOTES

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